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**National Highway  
Traffic Safety  
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Bloomington, Indiana 47403-1501

**ON-SITE PASSIVE BELT INVESTIGATION**

CASE NO. - 96-23  
FLEET - PRIVATE VEHICLE  
LOCATION -  
ACCIDENT DATE - 1996

Submitted By:

Senior Staff Associate  
and

Associate Scientist

1997

Revised Submission:

2001

Contract Number: DTNH22-94-D-17058

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National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

# Technical Report Documentation Page

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15. <i>Supplementary Notes</i> On-site passive belt investigation involving a 1993 Mazda MX-3, two-door hatchback coupe, with motorized, automatic belts and a 1992 Cadillac DeVille, four-door sedan, with manual belts and driver air bag.					
16. <i>Abstract</i> This report covers an on-site investigation of a passive belt equipped crash that involved a 1993 Mazda MX-3 and an air bag equipped 1992 Cadillac DeVille. This crash is of special interest because both the Mazda's restrained driver and right front passenger were pregnant (i.e., both approximately 8 months) and lost their fetuses as a result of this crash. The MX-3 was traveling south in the middle, southbound, through lane of a seven-lane, divided, state trafficway (i.e., southbound roadway had one deceleration lane and three through lanes; northbound roadway had three through lanes) when a southbound, noncontact vehicle changed lanes in front of the MX-3 (case vehicle) causing the driver to brake and swerve left. As a result, the case vehicle began rotating counterclockwise, crossed the grassy median, and entered and crossed the inside and middle northbound lanes, while rotating a total of approximately 200 degrees counterclockwise just prior to impact. The DeVille (vehicle #2) was traveling north in the outside northbound lane of the same, seven-lane, divided trafficway. The back left of the case vehicle was impacted by the front left vehicle #2 causing the vehicle #2's driver side supplemental restraint (air bag) to deploy. The case vehicle was equipped with front outboard two-point, motorized, shoulder belts which were in use at the time of the crash. The case vehicle's driver (19 year-old female) was normally postured, and her seat track was located in its forward-most position. The case vehicle was not equipped with a tilt steering wheel. She was also restrained by her active, two-point, lap belt and sustained moderate injuries which included: posteromedially fractures to her right ninth and tenth ribs, contusions to her right chest wall and hip, and other soft tissue injuries. The posture of the case vehicle's right front passenger (20 year-old female) is unknown, but her seat track was located between its middle and forward-most positions, and she was also restrained by her active, two-point, lap belt. She sustained critical injuries which included: bilateral tension pneumothoraces, a complex laceration to her uterus, and a traumatic brain injury. The driver's fetus had sustained bilateral subarachnoid hemorrhages. The passenger's fetus had sustained fatal chest and brain injuries, including heart and lung contusions and a fractured left parietal skull with bilateral subarachnoid hemorrhages. Vehicle #2's driver (73 year-old female) was normally postured, with her seat track located between its middle and forward-most positions, and the steering wheel was located in its middle position. She was also restrained by her active, three-point, lap and shoulder belt and sustained serious injuries which included: fractures to four right ribs and her left distal forearm and right heel.					
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## TABLE OF CONTENTS

	<u>Page No.</u>
SUMMARY . . . . .	1
CRASH SCHEMATIC . . . . .	2
ACCIDENT DATA . . . . .	3
AMBIENT CONDITIONS . . . . .	3
ROADWAY . . . . .	3
TRAFFIC CONTROLS . . . . .	4
VEHICLES . . . . .	5
VEHICLE DAMAGE . . . . .	6
EXTERIOR . . . . .	6
Deployment Impact (for Vehicle #2) . . . . .	6
INTERIOR . . . . .	6
REPAIR . . . . .	6
VEHICLE VELOCITY ESTIMATES . . . . .	7
COLLISION SEQUENCE . . . . .	7
PRE-CRASH . . . . .	7
CRASH . . . . .	7
POST-CRASH . . . . .	7
Occupants . . . . .	7
Police . . . . .	8
Rescue . . . . .	8
Removal . . . . .	9
HUMAN FACTORS/OCCUPANT DATA . . . . .	9
DRIVERS . . . . .	9
RIGHT FRONT PASSENGER . . . . .	9
CASE VEHICLE DRIVER INJURIES . . . . .	10
FETUS IN CASE VEHICLE DRIVER INJURIES . . . . .	11
CASE VEHICLE RIGHT FRONT PASSENGER INJURIES . . . . .	11
FETUS IN CASE VEHICLE RIGHT FRONT PASSENGER INJURIES . . . . .	12
VEHICLE #2 DRIVER INJURIES . . . . .	13
CASE VEHICLE DRIVER KINEMATICS . . . . .	13
CASE VEHICLE PASSENGER KINEMATICS . . . . .	14
VEHICLE #2 AIR BAG SYSTEM . . . . .	16
Appendix A: Reconstruction Program Results . . . . .	17
SMASH (Damage Only Algorithm -- including Barrier Equivalent Speeds) . . . . .	18
TRC Vector Analysis Iterations . . . . .	22
Appendix B: SELECTED PHOTOGRAPHS . . . . .	27

# TRC/IU ON-SITE PASSIVE BELT INVESTIGATION

TRC/IU CASE NO. 96-23

FLEET - PRIVATE VEHICLE  
LOCATION -

## SUMMARY

This report concerns a motor vehicle crash involving a passive belt equipped 1993 Mazda MX-3, two-door hatchback coupe, and an air bag equipped 1992 Cadillac DeVille, four-door sedan occurring in 1996 at 3:42 p.m., in an urban area on a state road. This crash is of special interest because both the Mazda's restrained driver and right front passenger were pregnant (i.e., both approximately 8 months) and lost their fetuses as a result of this crash.

The MX-3 was traveling south in the middle, southbound, through lane of a seven-lane, divided, state trafficway (i.e., southbound roadway had one deceleration lane and three through lanes; northbound roadway had three through lanes) when a southbound, noncontact, utility vehicle--traveling in the outside southbound lane, changed lanes into the middle southbound lane (i.e., in front of the case vehicle). The Mazda's driver braked and steered left. As a result, the MX-3 began rotating counterclockwise, crossed the grassy median, and entered the northbound lanes. The case vehicle crossed the inside and middle northbound lanes and had rotated approximately 200 degrees counterclockwise when it impacted the DeVille which was traveling north in the outside northbound lane of the same, seven-lane, divided trafficway. The DeVille's driver braked, leaving 5.5 meters (18 feet) of skidmarks on the roadway just prior to impact, and based on the damage to the two vehicles, the DeVille underrode the MX-3. The MX-3 subsequently rotated another 85 degrees counterclockwise after impact and came to rest straddling the outside lane and east shoulder of the northbound roadway, heading southwest. The DeVille rotated approximately 85 degrees clockwise after impact and came to rest on the east shoulder and roadside of the northbound roadway heading east.

The back left of the MX-3 was impacted by the front left of the DeVille. Both vehicles were towed due to damage. CDCs were determined to be: 07-BYEW-6 for the MX-3 and 12-FDEW-3 for the DeVille. The SMASH reconstruction program, damage only algorithm, was used on the highest severity impact for both vehicles. The Total, Longitudinal, and Lateral Delta Vs for the MX-3 are respectively: 52 km.p.h. (32 m.p.h.), +40 km.p.h. (+25 m.p.h.), and +33 km.p.h. (+21 m.p.h.). The Total, Longitudinal, and Lateral Delta Vs for the DeVille are respectively: 37 km.p.h. (23 m.p.h.), -37 km.p.h. (-23 m.p.h.), and +6 km.p.h. (+4 m.p.h.).

The 1993 Mazda MX-3 was equipped with driver and right front passenger, two-point, motorized, shoulder belts which were in use at the time of the crash. The 1992 Cadillac DeVille was equipped with a driver supplemental restraint system (air bag) which deployed as a result of the frontal impact. The driver of the Mazda (19 year-old female) was normally postured with her seat track located in its forward-most position. The MX-3 was not equipped with a tilt steering wheel. She was also restrained by her available, active, two-point, lap belt and sustained, according to her interview and her medical records, moderate injuries which included: posteromedially fractures to her right ninth and tenth ribs from her seatback, contusions to her right chest wall and hip from her safety belts, and other soft tissue injuries. The posture of the MX-3's right front passenger (20 year-old female) is unknown, but her seat track was located between its middle and forward-most positions, and she was also restrained by her available, active, two-point, lap belt. She sustained, according to her interview and her medical records, critical blunt thoracic and abdominal cavity injuries which included: bilateral tension pneumothoraces and a complex laceration to her uterus (in third trimester) with 3-4 liters of blood loss. In addition, she sustained a traumatic brain injury and multiple soft tissue injuries. The driver's fetus was delivered vaginally and was either stillborn or died shortly thereafter. The fetus had bilateral subarachnoid hemorrhages. The right front passenger's fetus was delivered by cesarean section and sustained fatal chest and brain injuries which included: contusions to its right ventricle (heart), thymus, and bilateral lungs, and a fractured left parietal skull with bilateral subarachnoid hemorrhages. The driver (73 year-old female) of the DeVille was normally postured, with her seat track located between its middle and forward-most positions, and the steering wheel was located in its middle position. She was also restrained by her available, active, three-point, lap and shoulder belt and sustained, according to her interview, serious injuries which included: fractures to four right ribs and her left distal forearm and right heel. In addition, she sustained sprains to her left wrist and right ankle, a lip laceration, and a right knee contusion.

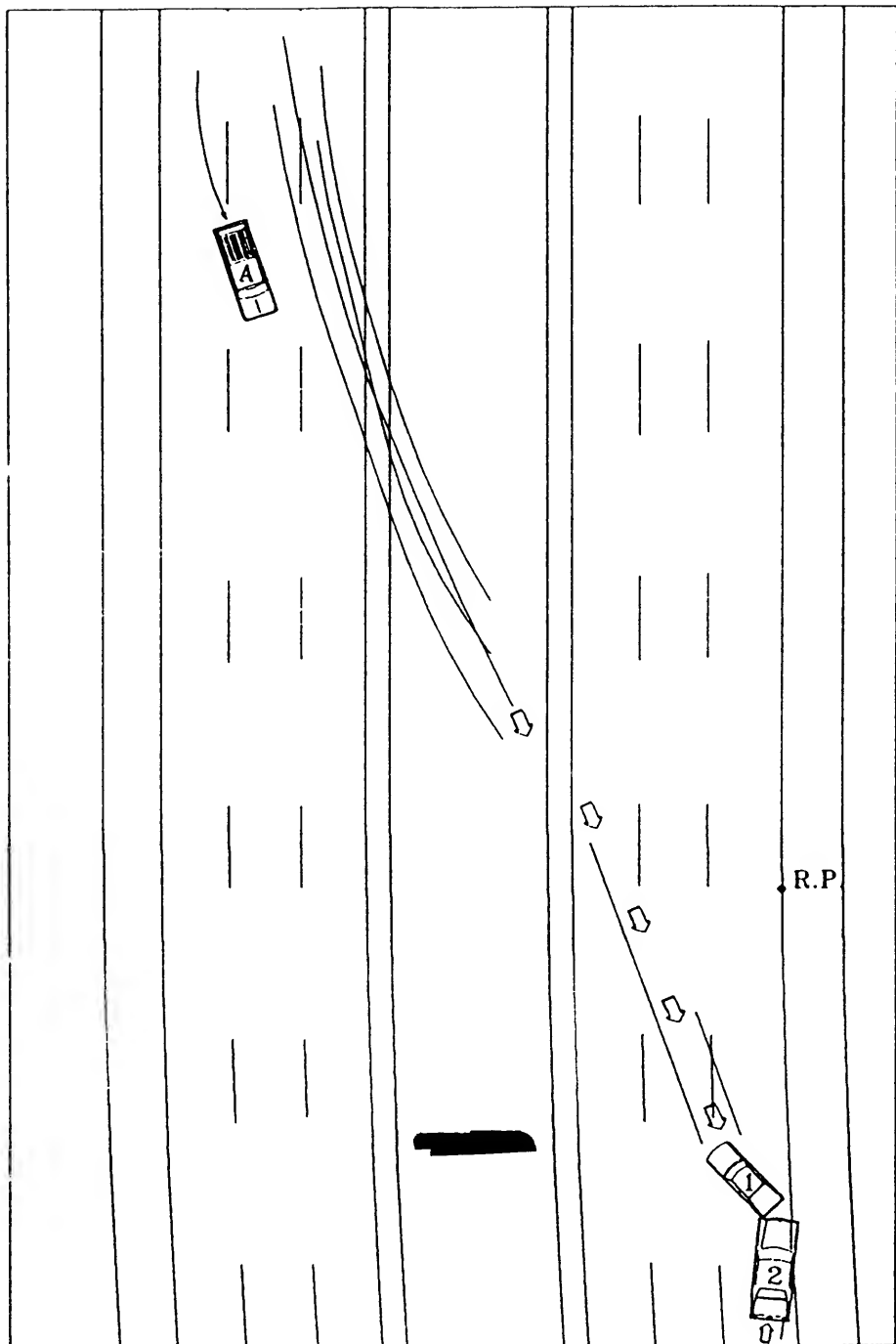


Road Surface: Concrete  
 Road Condition: Dry  
 Curvature: Straight for  
     Case Vehicle; curve right  
     for Vehicle #2  
 Grade, pre-impact = 4.5 %  
     negative to south for Case  
     Vehicle; 4.8 % positive to  
     north for Vehicle #2

This crash diagram was  
 taken from the Police  
 Accident Report.

**NO ON-SCENE  
 MEASUREMENTS  
 WERE TAKEN!**

See footnote to ROADWAY  
 section on following page!



POINT OF IMPACT:  
 57 FEET SOUTH OF REFERENCE POINT  
 4 FEET WEST OF EAST EDGE OF  
 [REDACTED] PARKWAY

TIREMARKS:  
 UNIT-1 HAD 180 FEET OF SCUFFS BEFORE IMPACT  
 UNIT-2 HAD 18 FEET OF SKIDS BEFORE IMPACT

# TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-23

FLEET - PRIVATE VEHICLE  
LOCATION -

## ACCIDENT DATA

Location/Street:

State:

Area/Type: Urban, commercial

Accident Date/Time: 1996, @ 3:42 p.m.

Investigating Police Agency:

Accident Type: Vehicle / Vehicle - obtuse angle (based on vehicle's center of gravity)

Occupant Injury Severity  
(passive belted vehicle):  
Driver: right rib fractures (AIS-2)  
Right Front Passenger: ruptured uterus (AIS-5) and tension pneumothorax (AIS-5)  
Each occupant had a fetus (both third trimester) that died post-crash

## AMBIENT CONDITIONS

Light Conditions: Daylight

Weather Condition: Cloudy per police photographs

Precipitation: None per Police Accident Report

Road Surface: Dry per Police Accident Report

Temperature: 78 degrees F per Police Accident Report; 26 degrees C @ applicable city airport

## ROADWAY<sup>1</sup>

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Location:	State expressway	State expressway

<sup>1</sup> On this Special Crash Investigation, this crash was investigated by a police officer trained by the Transportation Safety Institute in Based on the length of the scene, the high and continuous volume of traffic present at the scene, and the quality of the police diagram, the scene data are taken from the Police Accident Report, our interview with the Case Vehicle's Driver, and/or the on-scene photographs--many of which were provided by the investigating police agency.

ROADWAY<sup>1</sup> (CONTINUED)

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Number of Travel Lanes:	Four: three southbound through lanes and one southbound deceleration lane (right-hand exit)	Three northbound through lanes
Lane Width:	3.8 meters (12.5 feet)	3.8 meters (12.5 feet)
Surface Type:	Concrete	Concrete
Median:	8.5 meters (27.8 feet)	8.5 meters (27.8 feet)
Shoulders:	Paved: 3.0 meters (10.0 feet) on west, 1.2 meters (4.0 feet) on east	Paved: 3.0 meters (10.0 feet) on east, 1.2 meters (4.0 feet) on west
Vertical alignment:	4.5% negative to south	4.8%, positive to north
Horizontal alignment:	Straight	Curve right
Estimated Coefficient of Friction:	.70	.75
Traffic Density:	Moderate	Moderate

## TRAFFIC CONTROLS

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Signals:	None	None
Signs:	Regulatory SPEED LIMIT sign on exit ramp; Informational signs indicating interstate junctions	Information EXIT RAMP sign; Guide sign indicating exit for hospital
Markings:	Dashed white lines separating inside, middle, and outside lanes; solid white line separating outside lane and deceleration lane; solid yellow line separating inside lane and east shoulder	Dashed white lines separating inside, middle, and outside lanes; solid white line separating outside lane and east shoulder; solid yellow line separating inside lane and west shoulder
Speed Limit:	97 km.p.h. (60 m.p.h.)	97 km.p.h. (60 m.p.h.)

## VEHICLES

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Year:	1993	1992
Make:	Mazda	Cadillac
Model:	MX-3	DeVille
Body Type:	Two-door hatchback	Four-door sedan
V.I.N.	JM1EC4319P0-----	1G6CD53B3N4-----
Color:	Blue	Bronze
Mileage:	116,824 kilometers (72,591 miles)	Unknown: electronic
Engine:	1.6 liters, I-4	4.9 liters, V-8
Transmission:	Four-speed automatic	Four-speed automatic with overdrive
Steering:	Power-assisted, rack-and-pinion	Power-assisted, rack-and-pinion
Brakes:	Power-assisted, four-wheel disc	Power-assisted, front disc, rear drum
Padding:	Steering wheel and hub, "A"-pillars, sunvisors, dash, side door surfaces	Steering wheel and hub, "A"-pillars, sunvisors, dash, side door surfaces
Active Restraints:	Two-point, manual, lap belt for front outboard seats; three-point, manual, lap and shoulder belts for rear outboard seats	Three-point, manual, lap and shoulder belts in front and rear outboard seating positions; lap belt only at front and rear center positions
Passive Restraints:	Two-point, motorized, shoulder belt for front outboard seats	Factory installed driver supplemental restraint system (air bag)
Defects:	None	None
Fleet:	Private vehicle	Private vehicle
Tow status:	Towed due to damage	Towed due to damage

### VEHICLE DAMAGE

EXTERIORCase VehicleVehicle #2Deployment Impact (for Vehicle #2)

Event number:	One	One
Object Struck:	Vehicle #2	Vehicle #1
Damage location		
Damaged Plane:	Back	Front
Vertical Location		
On Plane:	Bumper	Bumper
Direct Begins:	Left bumper corner	Left bumper corner
Length Direct:	115 cm ( 45.3 in)	120 cm ( 47.2 in)
Field L:	152 cm ( 59.8 in)	178 cm ( 70.1 in)
C <sub>1</sub> :	91 cm ( 35.8 in)	52 cm ( 20.5 in)
C <sub>2</sub> :	82 cm ( 32.3 in)	47 cm ( 18.5 in)
C <sub>3</sub> :	79 cm ( 31.1 in)	42 cm ( 16.5 in)
C <sub>4</sub> :	77 cm ( 30.3 in)	30 cm ( 11.8 in)
C <sub>5</sub> :	72 cm ( 28.3 in)	23 cm ( 9.1 in)
C <sub>6</sub> :	70 cm ( 27.6 in)	13 cm ( 5.1 in)
D:	-19 cm ( 7.5 in)	-29 cm ( 11.4 in)
Maximum Crush:	91 cm ( 35.8 in)	62 cm ( 24.4 in)
Location:	C <sub>1</sub>	C <sub>2</sub> above bumper
CDC:	07-BYEW-6 (-140)	12-FDEW-3 (-10)
Damaged Components:	Rear bumper, hatch, backlight, left rear wheel assembly, rear axle, and gas tank	Front bumper, hood, both front headlight assemblies, grille, radiator, and front wheel assembly

INTERIOR

Damaged Components:	Back seat, backlight, rear header, passenger seat-back and floor pan	Windshield
Other Evidence of Occupant Contact:	Roof and driver door	Lower dash
Manual Restraint System Failures:	None	None
Seat Performance Failures:	Right front passenger seatback	None

REPAIR

Cost Estimate:	Totaled out	Totaled out
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### VEHICLE VELOCITY ESTIMATES

<u>Highest Delta "V"</u>	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Reconstruction Program:	SMASH	SMASH
Program Algorithm:	Damage only	Damage only
Barrier Equivalent:	51 km.p.h. ( 32 m.p.h.)	39 km.p.h. ( 24 m.p.h.)
Total Delta "V":	52 km.p.h. ( 32 m.p.h.)	37 km.p.h. ( 23 m.p.h.)
Longitudinal Delta "V":	+40 km.p.h. (+25 m.p.h.)	-37 km.p.h. (-23 m.p.h.)
Lateral Delta "V":	+33 km.p.h. (+21 m.p.h.)	+6 km.p.h. ( +4 m.p.h.)

### COLLISION SEQUENCE

**PRE-CRASH:** According to the Police Accident Report and the case vehicle's driver, the case vehicle (MX-3) was traveling south in the middle, southbound, through lane of a seven-lane, divided, state trafficway (i.e., southbound roadway had one deceleration lane and three through lanes; northbound roadway had three through lanes) and was intending to continue in its southward direction of travel when a southbound, noncontact, utility vehicle--traveling in the outside southbound lane, changed lanes into the middle southbound lane (i.e., in front of the case vehicle). The case vehicle's driver braked and steered left. As a result, the case vehicle began rotating counterclockwise, crossed the grassy median, and entered the northbound lanes. The case vehicle crossed the inside and middle northbound lanes and had rotated approximately 200 degrees counterclockwise just prior to impact. Vehicle #2 (DeVille) was traveling north in the outside northbound lane and was intending on continuing in its northward direction of travel. According to the Police Accident Report and the driver of vehicle #2, vehicle #2 braked, leaving 5.5 meters (18 feet) of skidmarks on the roadway just prior to impact. The crash occurred in the outside lane of the northbound roadway.

**CRASH:** According to the Police Accident Report and the vehicle inspections, the back left of the case vehicle was impacted by the front left of vehicle #2 causing vehicle #2's driver side supplemental restraint system (air bag) to deploy. Based on the damage to the two vehicles, vehicle #2 underrode the case vehicle. The case vehicle subsequently rotated another 85 degrees counterclockwise after impact and came to rest straddling the outside lane and east shoulder of the northbound roadway, heading southwest. Vehicle #2 rotated approximately 85 degrees clockwise after impact and came to rest on the east shoulder and roadside of the northbound roadway heading east.

**POST-CRASH:**

**Occupants:** According to the Police Accident Report and the case vehicle's driver, both case vehicle occupants remained inside the vehicle at final rest. Both the driver and right front passenger, who were both eight months pregnant, were unable to exit the case vehicle not only due to their injuries, but also because both of the



## COLLISION SEQUENCE (CONTINUED)

## POST-CRASH:

## Occupants: (Continued)

case vehicle's doors were jammed closed. According to the case vehicle's driver and their medical records, following the crash the driver was conscious, while the right front seat passenger was unconscious. Based on the vehicle inspection and the Police Accident Report, both case vehicle occupants were properly restrained by their available, passive, motorized, two-point, shoulder belts and active, two-point, lap belts. According to vehicle #2's driver, she remained inside the vehicle at final rest and was conscious, but she was unable to exit her vehicle because of her injuries. In addition, she was restrained by her available, active, three-point, lap and shoulder belt, and her driver side air bag deployed preventing her from sustaining any serious head injuries.

**Police:** The investigating police agency was notified of the crash within an unknown amount of minutes post-crash and the primary investigative officers arrived on-scene eighteen minutes post-crash. Traffic control procedures were established and emergency medical, fire, and towing services were called to assist.

**Rescue:** According to the case vehicle's driver and their medical records, after extrication (see **SELECTED PHOTOGRAPHS #41, #43, and #55 through #57**) the driver and right front passenger were both transported by ambulance to a medical facility where they were hospitalized. According to the interview with the case vehicle's driver and her medical records, she sustained moderate injuries which included: posteromedial fractures to her right ninth and tenth ribs from her seat-back, contusions to her right chest wall and hip from her safety belts, and other soft tissue injuries. According to the interview with the right front passenger and her medical records, she sustained critical blunt thoracic and abdominal cavity injuries which included: bilateral tension pneumothoraces and a complex laceration to her uterus (in third trimester) with 3-4 liters of blood loss. In addition, she sustained a traumatic brain injury and multiple soft tissue injuries. According to their medical records, both occupants were approximately eight months pregnant and both of their fetuses were in danger as a result of this crash. The driver's fetus was delivered vaginally and was either stillborn or died shortly thereafter. The fetus had sustained bilateral subarachnoid hemorrhages. The right front passenger's fetus was delivered by cesarean section and had sustained fatal chest and brain injuries which included: contusions to its right ventricle (heart), thymus, and bilateral lungs, and a fractured left parietal skull with bilateral subarachnoid hemorrhages.

According to the driver of vehicle #2, she was transported by ambulance to a medical facility where she was hospitalized overnight prior to being transferred to a rehabilitation facility. According to vehicle #2's driver, she sustained (1) a cut lip from her deploying air bag, (2) four fractured right ribs from the torso portion of her seatbelt, her air bag, the steering wheel, or some combination thereof, (3) a fracture to her right heel and sprained right ankle from the impact force through her toepan area, (4) a fracture and sprain to her left forearm/wrist from holding the steering wheel, and (5) a right knee contusion from the dash.

## COLLISION SEQUENCE (CONTINUED)

## POST-CRASH: (Continued)

Removal: Following the police investigation, both the case vehicle and vehicle #2 were towed from the scene.

## HUMAN FACTORS/OCCUPANT DATA

<u>DRIVERS:</u>	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Age:	19 year-old	73 year-old
Sex:	Female	Female
Height:	157 cm (62 in)	155 cm (61 in)
Weight:	57 kg (126 lbs)	57 kg (125 lbs)
Occupation:	Student	Retired
Active Restraint System/Usage:	Two-point lap belt/Used	Three-point, lap and shoulder/Used
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report	Vehicle inspection, interviewee, and Police Accident Report
Passive Restraint System/Usage:	Two-point, motorized, shoulder belt/Used	Factory installed air bag/air bag deployed
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report	Vehicle inspection, interviewee, and Police Accident Report
Eyeglasses/contacts:	Not applicable	Prescription eyeglasses
Vehicle Familiarity:	Driven four times (total) over a two month period	20,921 km (13,000 mi) per year; driven for 46 months
Route Familiarity:	First time on road	Twice weekly
Trip Plan:	Shopping to home	Social/recreational (i.e., vacation) to home
Manner of Leaving Scene:	Ambulance	Ambulance
Type of Medical Treatment:	Hospitalized	Hospitalized
<u>RIGHT FRONT PASSENGER:</u>	<u>Case Vehicle</u>	
Age:	20 year-old	

## HUMAN FACTORS/OCCUPANT DATA (CONTINUED)

**RIGHT FRONT PASSENGER:**

(Continued)

**Case Vehicle**

Sex:	Female
Height:	160 cm (63 in)
Weight:	67 kg (147 lbs)
Active Restraint System/Usage:	Two-point lap belt/Used
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report
Passive Restraint System/Usage:	Two-point, motorized, shoulder belt/Used
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report
Manner of Leaving Scene:	Ambulance
Type of Medical Treatment:	Hospitalized

## CASE VEHICLE DRIVER INJURIES

<b><u>Description of Injury</u></b>	<b><u>A.I.S.</u></b>	<b><u>Source of Data</u></b>	<b><u>Injury Mechanism</u></b>	<b><u>Certainty</u></b>
Fracture, nondisplaced, right ninth and tenth ribs postero-medial	450220.2,1	2	Driver's side seat back	{Certain}
Contusion right chest wall	490402.1,1	2	Driver's automatic, shoulder belt	{Probable}
Contusion right hip	890402.1,1	2	Driver's manual lap belt	{Probable}
Abrasion arm, not further specified	790202.1,9	3	Unknown	{Unknown}
Contusion over right elbow	790402.1,1	3	Driver's side seat back	{Probable}
Laceration right elbow	790600.1,1	2	Flying glass	{Possible}
Contusion left posterior scalp	190402.1,6	7	Roof over left rear seat	{Certain}
Contusion left arm near axilla	790402.1,2	7	Interior surface of driver's door	{Certain}
Contusion right knee	890402.1,1	7	Steering column, underneath side	{Possible}

FETUS IN CASE VEHICLE DRIVER INJURIES<sup>2,3</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism<sup>2</sup></u>	<u>Certainty</u>
Subarachnoid hemorrhage, minimal, over cerebral hemispheres	140684.3,3 <sup>3</sup>	1	Unknown	{Unknown}

CASE VEHICLE RIGHT FRONT PASSENGER INJURIES<sup>4,5</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Traumatic brain injury <sup>4</sup>	115299.7,0	2	Roof over right rear seat	{Possible}
Blunt thoracic cavity injury with bilateral tension pneumothoraces <sup>5</sup>	442210.5,3	2	Right front seat back <sup>6</sup> {below}	{Certain}

<sup>2</sup> The NASS CDS injury codes are not designed to handle a fetus. This fetus was in its third trimester; however, the position of the fetus at the time of the crash is not documented. Based on occupant kinematic principals (i.e., PDOF was 7 o'clock), the fetus was most likely traumatized by the mother's spinal column and/or pelvic girdle; however, rebound trauma from the mother's safety belts cannot be excluded.

<sup>3</sup> Strictly according to NASS CDS Injury Coding protocol, the Aspect "bilateral" is not allowed for the purpose of combining these lesions when they involve both cerebral hemispheres; each "lesion-hemisphere combination" should be coded separately. Bilateral is used here because the contact mechanism for each cerebral hemisphere is identical.

<sup>4</sup> The patient was unconscious on arrival at the emergency room. In addition, she sustained brain dysfunction as a result of the crash; however, it is not clear if the unconsciousness and subsequent brain dysfunction resulted from a blow to the head or is a result of the hypovolemic shock that the patient went into following the massive blood loss associated with her ruptured uterus. According to the occupant's medical records the dysfunction included: significant (1) difficulty with short term memory, verbal attention, and verbal concentration, (2) paraphasia, and (3) disorientation and increased difficulty with functional tasks. According to her records, she was a level V on the Rancho Los Amigos Scale of Cognitive Function.

The following terms are defined in DORLAND'S ILLUSTRATED MEDICAL DICTIONARY as follows:

**hypovolemic shock** -- shock resulting from insufficient blood volume for the maintenance of adequate cardiac output, blood pressure and tissue perfusion. Without modification the term refers to absolute hypovolemic shock caused by acute hemorrhage or excessive fluid loss. Relative hypovolemic shock refers to a situation in which the blood volume is normal but insufficient because of widespread vasodilation as in neurogenic shock or septic shock.

**shock (shok)** -- 1. a sudden disturbance of mental equilibrium. 2. a condition of profound hemodynamic and metabolic disturbance characterized by failure of the circulatory system to maintain adequate perfusion of vital organs. It may result from inadequate blood volume (hypovolemic shock); inadequate cardiac function (cardiogenic shock); or inadequate vasomotor tone (neurogenic shock, septic shock).

<sup>5</sup> The following term is defined in DORLAND'S ILLUSTRATED MEDICAL DICTIONARY as follows:

**tension pneumothorax (noo "mo-thor'aks)** -- closed pneumothorax in which the tissues surrounding the opening into the pleural cavity act as valves, allowing air to enter but not to escape. The resultant positive pressure in the cavity displaces the mediastinum to the opposite side, with consequent embarrassment of respiration. Called also *pressure pneumothorax*.

CASE VEHICLE RIGHT FRONT PASSENGER INJURIES<sup>6</sup> (CONTINUED)

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Laceration, complex {rupture} uterus in third trimester with 3-4 liters of blood loss	545246.5,8	2	Right front seat back <sup>6</sup>	{Certain}
Contusion {bump} to right side of head	190402.1,1	7	Roof over right rear seat	{Certain}
Laceration {cut} right side of forehead with glass in hair	290600.1,7	7	Flying glass	{Probable}
Contusion {bruise} across abdomen	590402.1,8	7	Right front, manual, lap belt	{Probable}
Laceration {cuts} to right hand	790600.1,1	7	Flying glass	{Probable}

FETUS IN CASE VEHICLE RIGHT FRONT PASSENGER INJURIES<sup>7,8</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism<sup>7</sup></u>	<u>Certainty</u>
Contusion right ventricle of heart	441004.3,4	1	Unknown	{Unknown}
Subarachnoid hemorrhage in left and right parietal regions near midline	140684.3,3 <sup>8</sup>	1	Unknown	{Unknown}
Contusion thymus	No code!	1	Unknown	{Unknown}
Contusions lungs, bilaterally	441410.4,3	1	Unknown	{Unknown}
Fracture left parietal skull	150402.2,2	1	Unknown	{Unknown}
Hematoma, left subgaleal	190402.1,2	1	Unknown	{Unknown}

<sup>6</sup> The case vehicle's severe rear-end collision caused the right front seatback's folding lock to fail as a result of loading by this occupant. In addition, the rear bench seat intruded into the right front seatback. Finally, for the uterine rupture, the occupant's manual, two-point, lap belt was also loaded by the occupant at some point during this occupant's rebound, which followed the rear-end impact.

<sup>7</sup> The NASS CDS injury codes are not designed to handle a fetus. This fetus was in its third trimester; however, the position of the fetus at the time of the crash is not documented. Based on occupant kinematic principals (i.e., PDOF was 7 o'clock), the fetus was most likely traumatized by the mother's spinal column and/or pelvic girdle; however, rebound trauma from the mother's safety belts cannot be excluded.

<sup>8</sup> Strictly according to NASS CDS Injury Coding protocol, the Aspect "bilateral" is not allowed for the purpose of combining these lesions when they involve both cerebral hemispheres; each "lesion-hemisphere combination" should be coded separately. Bilateral is used here because the contact mechanism for each cerebral hemisphere is identical.

VEHICLE #2 DRIVER INJURIES<sup>9</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Fractured ribs, four on right, location not specified	450240.3,1	7	Unknown <sup>9</sup>	{Unknown}
Fractured left forearm above wrist	751800.2,2	7	Steering wheel rim	{Probable}
Sprain left wrist	751420.1,2	7	Steering wheel rim	{Probable}
Fracture right calcaneus {heel}	851400.2,1	7	Toe pan	{Probable}
Sprain right ankle	850206.1,1	7	Toe pan	{Probable}
Laceration upper lip	290600.1,8	7	Air bag, driver's side	{Probable}
Contusion {bruise} right knee	890402.1,1	7	Left dash below steering column	{Certain}

## CASE VEHICLE DRIVER KINEMATICS

According to the case vehicle's driver, immediately prior to the crash she was normally postured (i.e., seated upright with her back against the seatback, her left foot on the floor, her right foot on the brake, and both her hands on the steering wheel at the 7 and 5 o'clock position). According to the case vehicle's driver and the vehicle inspection, her seat track was located in the forward-most position, and the case vehicle was not equipped with a tilt steering wheel. According to the vehicle inspection, the driver's seatback, which was originally located in the upright position, was forced forward because of intrusion by the back seat. According to the vehicle inspection and driver's interview, she was also restrained by her available, passive, two-point, motorized, shoulder belt and active, two-point, lap belt.

According to the scene evidence and the interview with the case vehicle's driver, her initial recognition of an impending crash with the unknown, noncontact, utility vehicle in the middle southbound lane caused her to brake and steer to the left. As a result of these attempted avoidance maneuvers and the use of her available safety belts, she most likely moved slightly forward and to her right, loading her available restraints as the case vehicle went into a counterclockwise rotation, crossed the grassy median<sup>10</sup>, and entered and crossed the northbound lanes. After her initial braking and leftward steering maneuvers (i.e., to avoid the noncontact vehicle), the case

<sup>9</sup> Because of limited information [i.e., which four ribs were fractured and the location of the fracture site (e.g., anterior, anterolateral, lateral, etc.)], the exact cause of this injury is unknown. If the ribs were low (i.e., 6-12), then the occupant's safety belt could have been the cause. On the other hand, if the ribs were high (i.e., 1-5), then the torso portion of the safety belt would have to be excluded. In either case, given the location of the occupant's seat track (i.e., between middle and forward-most positions), the air bag and the steering wheel, either singularly or in combination, are strong candidates for the injury source.

<sup>10</sup> Based on the scene evidence (see **SELECTED PHOTOGRAPHS #06 through #08**) and occupant kinematic principles, the case vehicle decelerated through the median as it dug into the soft grassy terrain. This action would have caused the driver to load her available safety belts.

**CASE VEHICLE DRIVER KINEMATICS (CONTINUED)**

vehicle was out-of-control<sup>11</sup>, and the case vehicle's driver was unable to make any effective avoidance maneuvers just prior to the crash with vehicle #2. Because the case vehicle had rotated over 180 degrees counterclockwise and was now travelling essentially backwards and because of the driver's restraint usage, the case vehicle's driver most likely moved backwards toward her seatback and was essentially near her pre-avoidance posture (i.e., with noncontact vehicle) just prior to impact.

Based on the vehicle and scene inspections and occupant kinematic principles [Direction of Principle Force (PDOF) was 7 o'clock (-140 degrees)], the case vehicle's impact with vehicle #2 thrust the driver backward, upward, and slightly to her left. Because of the rearward nature of the crash, the driver's safety belts had no affect during her initial movement because she moved away from her restraints and loaded and slid up her seatback. An inspection of the case vehicle's interior revealed a head contact (scuff) to the roof just behind the driver's seatback; see **SELECTED PHOTOGRAPHS #64, #66, and #67**. In addition, there appeared to be two skin transfers to the left front door panel, one just below the arm rest and the other just below the window from her left arm; see **SELECTED PHOTOGRAPHS #44 through #46**. The driver's left head contusion was caused by contacting the roof and her right elbow contusion and rib fractures most likely occurred when she loaded the seatback. Based on the scene and vehicle inspections and occupant kinematic principles, after the initial impact with vehicle #2, the case vehicle spun an additional 85 degrees counterclockwise causing the driver to load the left front door, contusing her left upper arm.

Based on occupant kinematic principles, the case vehicle's driver rebounded forward and to her right after impacting the left front door. The driver's restraint usage most likely prevented her from either being ejected from the case vehicle or violently tossed around within the case vehicle. During this rebound, the driver's safety belts most likely contused her right chest and hip areas. According to the case vehicle's driver, at final rest she had slid back into her seat and was held tightly<sup>12</sup> against the seatback because the intrusion of the rear seat forced the driver's seatback slightly forward from its original upright position.

**CASE VEHICLE PASSENGER KINEMATICS**

According to the case vehicle's driver (i.e., friend) and the right front passenger, the right front passenger's posture immediately prior to the crash is unknown. According to the case vehicle's driver, prior to the initial pre-crash avoidance action (i.e., the noncontact vehicle) the right front passenger was normally postured (i.e., seated slightly reclined with her back against the seatback, her feet on the floor, and both her arms in her lap). According to the case vehicle's driver, the right front passenger's seat track was located between its middle and rearmost positions. According to the vehicle inspection, the right front passenger's seat track was located between its middle and forward-most positions and had most likely been pushed forward from

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<sup>11</sup> According to the witness reports on the Police Accident Report, the case vehicle became airborne after it exited the grassy median.

<sup>12</sup> According to the case vehicle's driver, at final rest the torso belt was so tight across her chest that she was having difficulty breathing.

## CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS (CONTINUED)

a combination of the rearward impact and the intrusion of the rear seat. It should be noted that in addition to the seat track sliding forward because of the rear impact, the right front passenger's seatback folding locks failed. According to the vehicle inspection and driver's interview, she was also restrained by her available, passive, two-point, motorized, shoulder belt and active, two-point, lap belt.

As a result of the case vehicle's attempted avoidance maneuvers in response to the noncontact vehicle (i.e., braking and steering left) and the use of her available safety belts, the right front passenger most likely moved slightly forward and to her right, loading her available restraints as the case vehicle went out-of-control (i.e., see driver's discussion above). Similarly, the right front passenger most likely moved backwards toward her seatback as the case vehicle was proceeding backwards just prior to impact. Once again, the available evidence suggests that the right front passenger was essentially near her pre-avoidance posture (i.e., with noncontact vehicle) just prior to the crash with vehicle #2.

Based on the vehicle and scene inspections and occupant kinematic principles [Direction of Principle Force (PDOF) was 7 o'clock (-140 degrees)], the case vehicle's impact with vehicle #2 thrust the right front passenger backward, upward, and slightly to her left. Because of the rearward nature of the crash, the right front passenger's safety belts had no affect during her initial movement because she moved away from her restraints and loaded and slid up her seatback. An inspection of the case vehicle's interior revealed a head contact (scuff) to the roof just behind the right front passenger's seatback; see **SELECTED PHOTOGRAPHS #64** and **#65**. The right front passenger's right head contusion was caused by contacting the roof. The roof may also have been the source of her traumatic brain injury; see footnote number 4 above. This occupant's critical injuries occurred when her chest and abdomen loaded the seatback<sup>13</sup>, which was also intruded upon by the rear seat. Based on the scene and vehicle inspections and occupant kinematic principles, after the initial impact with vehicle #2, the case vehicle spun an additional 85 degrees counterclockwise causing the right front passenger to move toward the driver and left front door.

Based on occupant kinematic principles, the case vehicle's right front passenger rebounded forward and to her right after loading her seatback and her passive, motorized, shoulder belt<sup>14</sup>. The driver's restraint usage most likely prevented her from either being ejected from the case vehicle or violently tossed around within the case vehicle. During this rebound, the right front passenger's manual lap belt most likely caused the occupant-reported contusion across her abdomen. Based on the available evidence, at final rest she most likely slid back into her seat and was against the seatback since the intruding back seat forced this occupant's seatback slightly forward from its original slightly reclined position.

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<sup>13</sup> Because of the collision configuration (see crash diagram) and based on occupant kinematic principles (improved PDOF = -140 degrees), the right front passenger was in the direct path of the energy force vector (PDOF) that occurred during this crash, much more so than the driver.

<sup>14</sup> The right front passenger may have contacted the right side of the driver's seatback or even the driver.



**VEHICLE #2 AIR BAG SYSTEM****DRIVER AIR BAG**

Air Bag Diameter (seam-to-seam, deflated):	Diameter: 65 cm (25.6 in)
Number of Vent Holes:	Two
Vent Hole Diameter:	2.0 cm (0.8 in)
Vent Hole Clock Positions:	Approximately 3 and 9 o'clock
Number of Air Bag Tethers:	None
Number of Air Bag Module Cover Flaps:	Two
Upper Cover Flap Dimensions:	Width: 20 cm (7.9 in) Height: 6 cm (2.4 in)
Lower Cover Flap Dimensions:	Width: 19 cm (7.5 in) Height: 7 cm (2.8 in)
Distance between Dash and Module's Cover Flap:	<b>Not applicable</b>
Generant Residue:	No unusual amount found

Appendix A:

**RECONSTRUCTION PROGRAM RESULTS:**

**SMASH  
(DAMAGE ONLY ALGORITHM)**

**TRC VECTOR ANALYSIS ITERATIONS**

**SMASH**  
**(DAMAGE ONLY ALGORITHM**  
**-- INCLUDING**  
**BARRIER EQUIVALENT SPEEDS)**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## SMASH PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

### Identifying Title

10

Primary  
Sampling Unit

9623

Case No.-Stratum

01

Accident Event  
Sequence No.

1 1

Date (Month, day, year) of Run

### GENERAL INFORMATION

#### VEHICLE 1

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

01  
1993

MAZDA

MX-3

3H

07 BYEW6

± 140°

± 050°

#### VEHICLE 2

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

02  
1992

CADILLAC

SEDAN DeVille

45

12 FDEW3

± 10°

± 000°

### VEHICLE SPECIFICATIONS

#### VEHICLE 1

Wheelbase

Overall Length

Overall Width

Weight

1087 + 124 + 0 = 1211 kg

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

245 cm  
421 cm  
169 cm

1.6 L

FWD

1

1

#### VEHICLE 2

Wheelbase

Overall Length

Overall Width

Weight

1629 + 57 + 5 = 1691 kg

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

289 cm  
524 cm  
186 cm

4.9 L

FWD

4

9

### DAMAGE INFORMATION

#### VEHICLE 1

Damage Known?

Damage Length

Damage Offset

Crush Depth:

152 Y cm  
± 19 cm  
91 cm  
82 cm  
79 cm  
77 cm  
72 cm  
70 cm

#### VEHICLE 2

Damage Known?

Damage Length

Damage Offset

Crush Depth:

178 Y cm  
± 29 cm  
52 cm  
47 cm  
42 cm  
30 cm  
23 cm  
13 cm

## SCENE INFORMATION

Rest and Impact Positions ☐ No ☐ Yes

## VEHICLE 1

Rest X \_\_\_\_\_ m

Position Y \_\_\_\_\_ m

Heading Angle \_\_\_\_\_ °

Impact X \_\_\_\_\_ m

Position Y \_\_\_\_\_ m

Heading Angle \_\_\_\_\_ °

Slip Angle (-180 to +180) \_\_\_\_\_ °

## VEHICLE 2

Rest X \_\_\_\_\_ m

Position Y \_\_\_\_\_ m

Heading Angle \_\_\_\_\_ °

Impact X \_\_\_\_\_ m

Position Y \_\_\_\_\_ m

Heading Angle \_\_\_\_\_ °

Slip Angle (-180 to +180) \_\_\_\_\_ °

## VEHICLE MOTION

Sustained Contact ☐ No ☐ Yes

## VEHICLE 1

Vehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X \_\_\_\_\_ m

Position Y \_\_\_\_\_ m

Heading Angle \_\_\_\_\_ °

Curved Path ☐ No ☐ Yes

Point on Path

X \_\_\_\_\_ m Y \_\_\_\_\_ m

Rotation Direction ☐ None ☐ CW ☐ CCWRotation >360° ☐ No ☐ YesSustained Contact ☐ No ☐ Yes

## VEHICLE 2

Vehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X \_\_\_\_\_ m

Position Y \_\_\_\_\_ m

Heading Angle \_\_\_\_\_ °

Curved Path ☐ No ☐ Yes

Point on Path

X \_\_\_\_\_ m Y \_\_\_\_\_ m

Rotation Direction ☐ None ☐ CW ☐ CCWRotation >360° ☐ No ☐ Yes

## FRICTION INFORMATION

Coefficient of Friction

Rolling Resistance Option

1

## Vehicle 1 Rolling Resistance

LF \_\_\_\_\_

RF \_\_\_\_\_

LR \_\_\_\_\_

RR \_\_\_\_\_

## Vehicle 2 Rolling Resistance

LF \_\_\_\_\_

RF \_\_\_\_\_

LR \_\_\_\_\_

RR \_\_\_\_\_

IF THIS COMMON IMPACT WAS WITH A CDS VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Complete and ATTACH the appropriate

damage sketch and dimensions to the form

## Summary of Results Using Damage

Special Crash Investigation, TRC/IU 96-23, Task 0065

Speed Change  
(Damage)

## Vehicle #1

Total 52 km/h ( 32 mph)  
 Longitudinal 40 km/h ( 25 mph)  
 Latitudinal 33 km/h ( 21 mph)  
 PDOF Angle -140 °  
 Energy Dissipated = 204760 Joules ( 151003 Ft-Lb)  
 Barrier Equivalent Speed = 50.9 km/h ( 31.6 mph)  
 Calculated using size and stiffness categories.

## Vehicle #2

Total 37 km/h ( 23 mph)  
 Longitudinal -37 km/h ( -23 mph)  
 Latitudinal 6 km/h ( 4 mph)  
 PDOF Angle -10 °  
 Energy Dissipated = 99148 Joules ( 73118 Ft-Lb)  
 Barrier Equivalent Speed = 38.8 km/h ( 24.1 mph)  
 Calculated using size and stiffness categories.

## General Information

	Vehicle #1	Vehicle #2
Year	1993	1992
Make	Mazda	Cadillac
Model	MX-3	Sedan DeVille
CDC	07BYEW6	12FDEW3
Side Damaged	B	F
PDOF Angle	-140 °	-10 °
Heading Angle	-50 °	0 °

Calculation method:	Size and Stiffness	Size and Stiffness
Size Category	1	4
Stiffness Category	1	9
Vehicle Weight	1211 kgs ( 2670 lbs)	1691 kgs ( 3728 lbs)

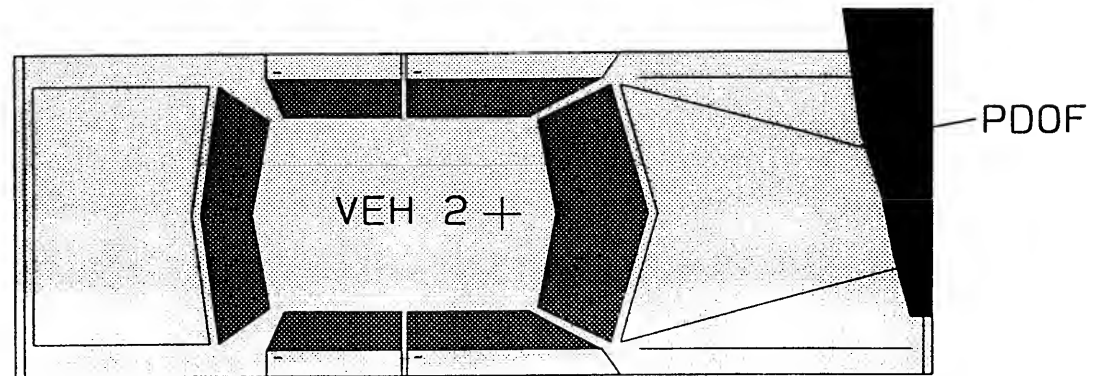
## Damage Information

	<u>Vehicle #1</u>	<u>Vehicle #2</u>
Vehicle Damage Known	Yes	Yes
Crush Length	152.0 cm ( 60 in)	178.0 cm ( 70 in)
C1	91.0 cm ( 36 in)	52.0 cm ( 20 in)
C2	82.0 cm ( 32 in)	47.0 cm ( 19 in)
C3	79.0 cm ( 31 in)	42.0 cm ( 17 in)
C4	77.0 cm ( 30 in)	30.0 cm ( 12 in)
C5	72.0 cm ( 28 in)	23.0 cm ( 9 in)
C6	70.0 cm ( 28 in)	13.0 cm ( 5 in)
D	-18.9 cm ( -7 in)	-28.9 cm ( -11 in)
D'	-21.9 cm ( -9 in)	-46.1 cm ( -18 in)

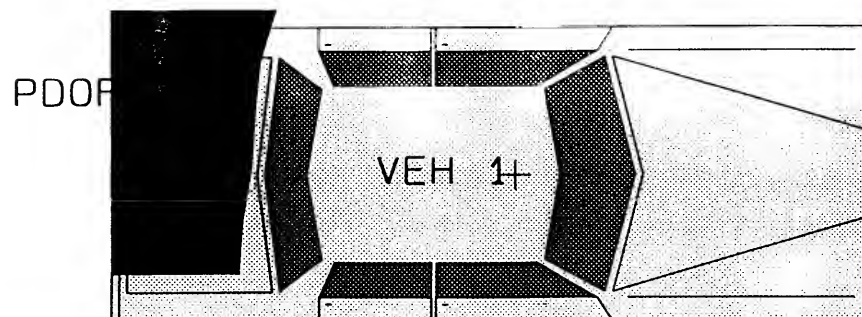
## Vehicle Dimensions

	<u>Vehicle #1</u>	<u>Vehicle #2</u>
Length	421.0 cm ( 166 in)	528.3 cm ( 208 in)
Width	169.0 cm ( 67 in)	186.4 cm ( 73 in)
Wheelbase	245.0 cm ( 96 in)	289.1 cm ( 114 in)
Weight	1211 kgs ( 2670 lbs)	1691 kgs ( 3728 lbs)
CG to Front of Veh	193.0 cm ( 76 in)	251.0 cm ( 99 in)
Engine Displacement	1.6 liters	4.9 liters
Moment of Inertia	193913 kgs ( 17164 lbs)	426440 kgs ( 37745 lbs)
Vehicle Mass	1211 kgs ( 6.9 lb-s <sup>2</sup> /in)	1691 kgs ( 9.7 lb-s <sup>2</sup> /in)

1992 Cadillac Sedan DeVille



1993 Mazda MX-3



Special Crash Investigation, TRC/IU 96-23, Task 0065  
, 1997



## **TRC VECTOR ANALYSIS ITERATIONS**

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	
Ln. Axis Heading Angle	310	0	
CG Heading Angle	150	0	
CRASH 3 Slip Angle	-160	0	
Weight-Cargo	0	5	
Weight-Vehicle Curb Wt	1087	1629	
Weight-Passenger(s)	124	57	
Weight-Total	1211	1691	
Estimated Speed	64 (40)	89 (55) (mph)	
Momentum	77504	150499	
PDOF (Degrees)	-140	-10	91
PDOF (Clock Direction)	7	12	
Theoretical Delta V	86.2	61.7	
Theoretical Common Vel.		31.7	Post-Crash CG Heading 25

①

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	
Ln. Axis Heading Angle	310	0	
CG Heading Angle	150	0	
CRASH 3 Slip Angle	-160	0	
Weight-Cargo	0	5	
Weight-Vehicle Curb Wt	1087	1629	
Weight-Passenger(s)	124	57	
Weight-Total	1211	1691	
Estimated Speed	48 (30)	89 (55) (mph)	
Momentum	58128	150499	
PDOF (Degrees)	-138	-8	91
PDOF (Clock Direction)	7	12	
Theoretical Delta V	77.4	55.4	
Theoretical Common Vel.		35.9	Post-Crash CG Heading 16

②

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	(3)	
-----	-----	-----		
Ln. Axis Heading Angle	310	0		
CG Heading Angle	150	0		
CRASH 3 Slip Angle	-160	0		
Weight-Cargo	0	5		
Weight-Vehicle Curb Wt	1087	1629		
Weight-Passenger(s)	124	57		
Weight-Total	1211	1691		
Estimated Speed	32 (20)	89 (55) (mph)		
Momentum	38752	150499		
PDOF (Degrees)	-136	-6	91	
PDOF (Clock Direction)	7	12		
Theoretical Delta V	68.6	49.2		
Theoretical Common Vel.	40.8	Post-Crash CG Heading	9	

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	(4)	
-----	-----	-----		
Ln. Axis Heading Angle	310	0		
CG Heading Angle	150	0		
CRASH 3 Slip Angle	-160	0		
Weight-Cargo	0	5		
Weight-Vehicle Curb Wt	1087	1629		
Weight-Passenger(s)	124	57		
Weight-Total	1211	1691		
Estimated Speed	16 (10)	89 (55) (mph)		
Momentum	19376	150499		
PDOF (Degrees)	-133	-3	91	
PDOF (Clock Direction)	8	12		
Theoretical Delta V	60.1	43.1		
Theoretical Common Vel.	46.2	Post-Crash CG Heading	4	

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	
Ln. Axis Heading Angle	310	0	
CG Heading Angle	150	0	
CRASH 3 Slip Angle	-160	0	
Weight-Cargo	0	5	
Weight-Vehicle Curb Wt	1087	1629	
Weight-Passenger(s)	124	57	
Weight-Total	1211	1691	
Estimated Speed	64 (40)	80 (50) (mph)	
Momentum	77504	135280	
PDOF (Degrees)	-141	-11	91
PDOF (Clock Direction)	7	12	
Theoretical Delta V	81.1	58.1	
Theoretical Common Vel.		27.0	Post-Crash CG Heading 30

⑤

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	
Ln. Axis Heading Angle	310	0	
CG Heading Angle	150	0	
CRASH 3 Slip Angle	-160	0	
Weight-Cargo	0	5	
Weight-Vehicle Curb Wt	1087	1629	
Weight-Passenger(s)	124	57	
Weight-Total	1211	1691	
Estimated Speed	48 (30)	80 (50) (mph)	
Momentum	58128	135280	
PDOF (Degrees)	-139	-9	91
PDOF (Clock Direction)	7	12	
Theoretical Delta V	72.2	51.7	
Theoretical Common Vel.		30.9	Post-Crash CG Heading 19

⑥

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	(7)	
Ln. Axis Heading Angle	310	0		
CG Heading Angle	150	0		
CRASH 3 Slip Angle	-160	0		
Weight-Cargo	0	5		
Weight-Vehicle Curb Wt	1087	1629		
Weight-Passenger(s)	124	57		
Weight-Total	1211	1691		
Estimated Speed	32 (20)	80 (50) (mph)		
Momentum	38752	135280		
PDOF (Degrees)	-137	-7		'91
PDOF (Clock Direction)	7	12		
Theoretical Delta V	63.5	45.4		
Theoretical Common Vel.		35.7	Post-Crash CG Heading	11

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	(8)	
Ln. Axis Heading Angle	310	0		
CG Heading Angle	150	0		
CRASH 3 Slip Angle	-160	0		
Weight-Cargo	0	5		
Weight-Vehicle Curb Wt	1087	1629		
Weight-Passenger(s)	124	57		
Weight-Total	1211	1691		
Estimated Speed	16 (10)	80 (50) (mph)		
Momentum	19376	135280		
PDOF (Degrees)	-134	-4		91
PDOF (Clock Direction)	8	12		
Theoretical Delta V	54.9	39.3		
Theoretical Common Vel.		41.0	Post-Crash CG Heading	5

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

(9)

Vector Analysis Area	GV27 (V01)	GV28 (V02)
-----	-----	-----
Ln. Axis Heading Angle	310	0
CG Heading Angle	150	0
CRASH 3 Slip Angle	-160	0
Weight-Cargo	0	5
Weight-Vehicle Curb Wt	1087	1629
Weight-Passenger(s)	124	57
Weight-Total	1211	1691
Estimated Speed	64 (40)	72 (45) (mph)
Momentum	77504	121752
PDOF (Degrees)	-142	-12 91
PDOF (Clock Direction)	7	12
Theoretical Delta V	76.6	54.8
Theoretical Common Vel.	23.1	Post-Crash CG Heading 35

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

(10)

Vector Analysis Area	GV27 (V01)	GV28 (V02)
-----	-----	-----
Ln. Axis Heading Angle	310	0
CG Heading Angle	150	0
CRASH 3 Slip Angle	-160	0
Weight-Cargo	0	5
Weight-Vehicle Curb Wt	1087	1629
Weight-Passenger(s)	124	57
Weight-Total	1211	1691
Estimated Speed	48 (30)	72 (45) (mph)
Momentum	58128	121752
PDOF (Degrees)	-140	-10 91
PDOF (Clock Direction)	7	12
Theoretical Delta V	67.6	48.4
Theoretical Common Vel.	26.6	Post-Crash CG Heading 22

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	(11)	
Ln. Axis Heading Angle	310	0		
CG Heading Angle	150	0		
CRASH 3 Slip Angle	-160	0		
Weight-Cargo	0	5		
Weight-Vehicle Curb Wt	1087	1629		
Weight-Passenger(s)	124	57		
Weight-Total	1211	1691		
Estimated Speed	32 (20)	72 (45) (mph)		
Momentum	38752	121752		
PDOF (Degrees)	-137	-7	91	
PDOF (Clock Direction)	7	12		
Theoretical Delta V	58.8	42.1		
Theoretical Common Vel.		31.1	Post-Crash CG Heading	12

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-23

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27 (V01)	GV28 (V02)	(12)	
Ln. Axis Heading Angle	310	0		
CG Heading Angle	150	0		
CRASH 3 Slip Angle	-160	0		
Weight-Cargo	0	5		
Weight-Vehicle Curb Wt	1087	1629		
Weight-Passenger(s)	124	57		
Weight-Total	1211	1691		
Estimated Speed	16 (10)	72 (45) (mph)		
Momentum	19376	121752		
PDOF (Degrees)	-134	-4	91	
PDOF (Clock Direction)	8	12		
Theoretical Delta V	50.2	36.0		
Theoretical Common Vel.		36.3	Post-Crash CG Heading	5

## TRC VECTOR ANALYSIS PROGRAM

PDOF (Direction of Principal Force) is assigned based on the vehicular crush. Heading Angles are assigned based on scene evidence and Police Accident Reported crash configurations. This program was created to enable researchers in the NASS CDS to assess the compatibility of their assigned vehicle PDOFs and heading angles. When two vehicles are involved in an impact, researchers were often times submitting PDOFs that were not compatible with their heading angle assignments, indicating a lack of understanding of basic vector analysis concepts. Subsequently, the TRC has used this program to help verify our field PDOF assignments by making logical changes in the reconstructed crash configuration and determining the affect these changes have on PDOF.

**Principal:** This program is based on the geometric triangle rule (i.e., the sum of the three angles of a triangle must equal 180 degrees). The direction of one vehicle's (e.g., the case vehicle or Vehicle #1) CG (i.e., Center of Gravity) forms one side of the triangle. The direction of the other vehicle's (e.g., Vehicle #2) CG forms a second side of the triangle. The third side of the triangle is then formed by each vehicle's respective PDOF because the forces are assumed to act collinear.

**Assumptions:** It is assumed that each vehicle's weight can be represented by a *"point-mass"*. It is assumed that the vector force acting on each vehicle goes through the center of gravity (i.e., CG) of the vehicle. Further, it is assumed that the vehicles move off together joined as one object. This program does not take into affect the mass reduction that occurs in other reconstruction programs since its primary purpose is to check the compatibility of the field determined PDOF and Heading Angle.

**Inputs:** Heading Angle, Slip Angle (*"Yaw"*), Weights (Curb Weight, Cargo Weight, and Weight of all occupants), and Speed

**Outputs:** This program's primary output is each vehicle's theoretical PDOF, presented in both degrees and CDC clock directions. Other outputs include a theoretical Delta V and a theoretical Common Velocity. The theoretical Delta V shows the maximum Delta V for the given speeds and weights assuming a dead center impact. For special crash investigation purposes, the last two outputs should be essentially ignored.

**Use:** The TRC uses this program on nonaxial collisions involving two vehicles to vary the *"less established inputs"* in order to determine what theoretical affect these changes have on our field observed PDOFs. The most solid input is the weights of the respective vehicles. Even though the cargo weight is rarely accurately known, its order of magnitude is such that in the vast majority of crashes its affect is minor. The next solid inputs are the vehicle's heading angle and slip angle. In most cases these are fairly well known from the available physical evidence. The least solid input is the vehicle's speed. The submitted iterations show the inputs and what variations to those inputs that the TRC took into consideration. The PDOF outcomes are then compared with our field observed PDOF and adjustments are made, if necessary, in our final coding.

**Purpose:** This program is but one more tool in the hands of a researcher aimed at providing the best data.



TRANSPORTATION RESEARCH CENTER

Indiana University  
Bloomington, Indiana 47403-1501

**SELECTED PHOTOGRAPHS**

A total of ninety-two color copies of photographs are presented and referenced as Photograph #01 through Photograph #92. Photographs numbered #04 through #08, #10 through #16, #18, and #19 were taken and made available by the applicable city, police department. The remainder of these photographs were taken by the Transportation Research Center.

CASE NO. - 96-23  
FLEET - PRIVATE VEHICLE  
LOCATION -  
ACCIDENT DATE - 1996

Submitted By:

Senior Staff Associate  
and

Associate Scientist

1997

Revised Submission:

2001

Contract Number: DTNH22-94-D-17058

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003



# 01: Case Vehicle's southward travel path in middle (3 southbound through lanes, 1 southbound deceleration lane) southbound through lane prior to evasive action



# 02: Case Vehicle's southward travel path in middle southbound lane approximately 30 meters (98 feet) prior to taking evasive action



# 03: Case Vehicle's southward travel path in middle southbound lane when noncontact vehicle changed lanes from outside to middle lane just prior to evasive action



# 04: On-scene view of Case Vehicle's south-southeastward travel path at start of counterclockwise rotation ~ 60 meters (197 feet) from impact in northbound lanes





# 05: On-scene view of Case Vehicle's south-southeastward travel path while in yaw and crossing inside southbound lane; NOTE: yellow dots highlight tire marks



# 06: On-scene view of Case Vehicle's southeastward travel path in a yaw as it entered the median approximately 48 meters (157 feet) from impact in northbound lanes





# 07: On-scene view of Case Vehicle's southeastward travel path in median approximately 40 meters (131 feet) from impact in northbound lanes



# 08: On-scene view of Case Vehicle's southeastward travel path as it crosses the median approximately 30 meters (98 feet) from impact in northbound lanes



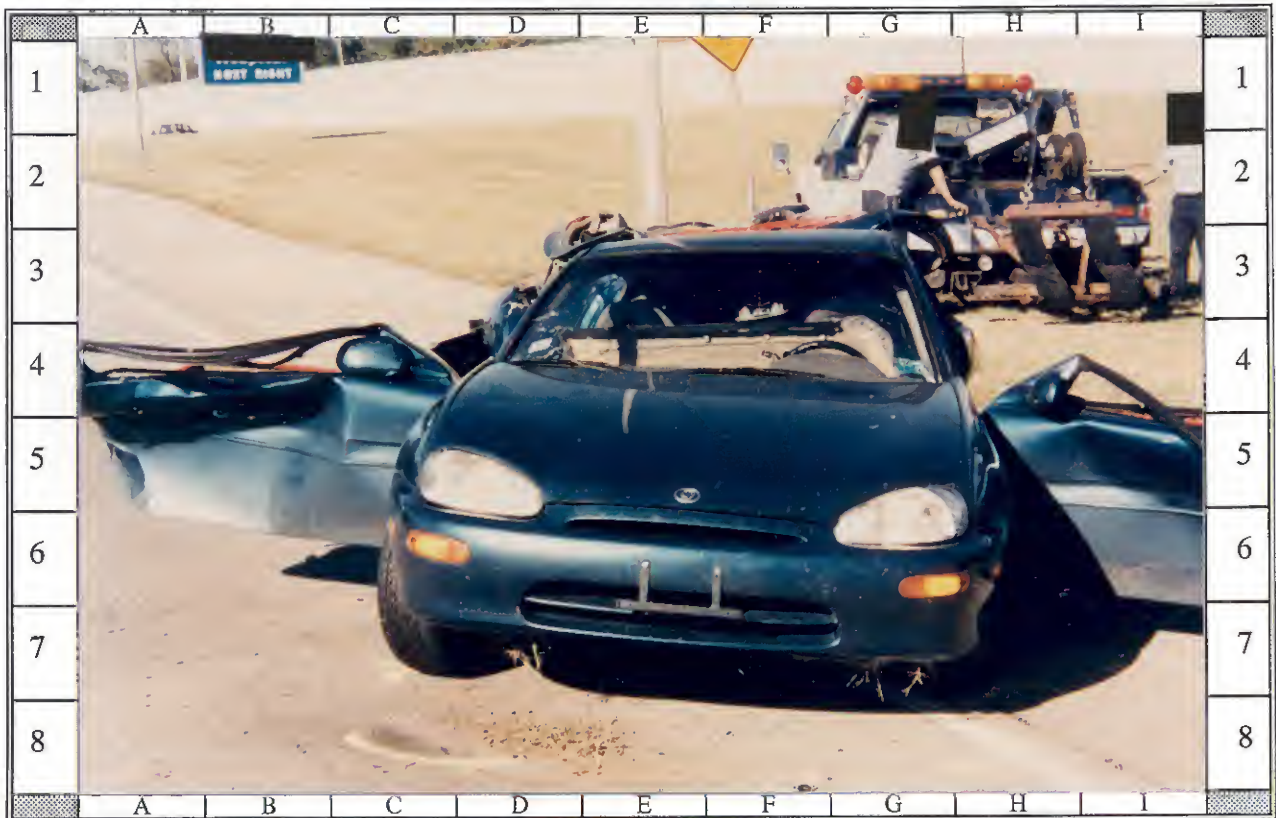


# 09: Case Vehicle's southeastward travel path across the inside and middle northbound lanes while rotating ~190 degrees counterclockwise before impact in outside lane



# 10: On-scene northeast view of Case Vehicle (left-hand side) and Vehicle #2 (right-hand side) at final rest on east shoulder and roadside of northbound lanes





# 11: On-scene northeast view of Case Vehicle at final rest, heading southwest, straddling east shoulder & outside northbound lane after extrication of both occupants



# 12: On-scene southward view at Case Vehicle at final rest, heading southwest, straddling east shoulder and outside northbound lane; NOTE: severe back damage





# 13: On-scene westward view of Case Vehicle's final rest, heading southwest, straddling east shoulder and outside northbound lane; NOTE: gasoline spill



# 14: On-scene southwest view of Vehicle #2's damaged front at final rest heading east-northeast





# 15: On-scene west-northwest view of Vehicle #2's damaged front at final rest heading east-northeast



# 16: On-scene westward view of Case Vehicle (right-hand side) and Vehicle #2 (left-hand side) at final rest





# 17: West-southwest view of Vehicle #2's final rest position, outlined by police, heading east-northeast



# 18: On-scene southward view at both vehicle's at final rest; NOTE: Vehicle #2 was coming out of a right-hand curve





# 19: On-scene post-crash view of both vehicles at maximum engagement as determined by police; NOTE: vehicles were put together on-scene by police and tow trucks



# 20: Northwestward view from final rest area of Case Vehicle's southeast travel path across median and northbound lanes





# 21: Northwestward view from median of Case Vehicle's southeast travel path into median from middle southbound through lane



# 22: Vehicle #2's north-northwestward travel path in right-hand curve approximately 30 meters (98 ft) south of impact



# 23: Vehicle #2’s northwestward travel path coming out of right-hand curve approximately 15 meters (49 ft) south of impact



# 24: Vehicle #2’s northward travel path at approximate point of impact



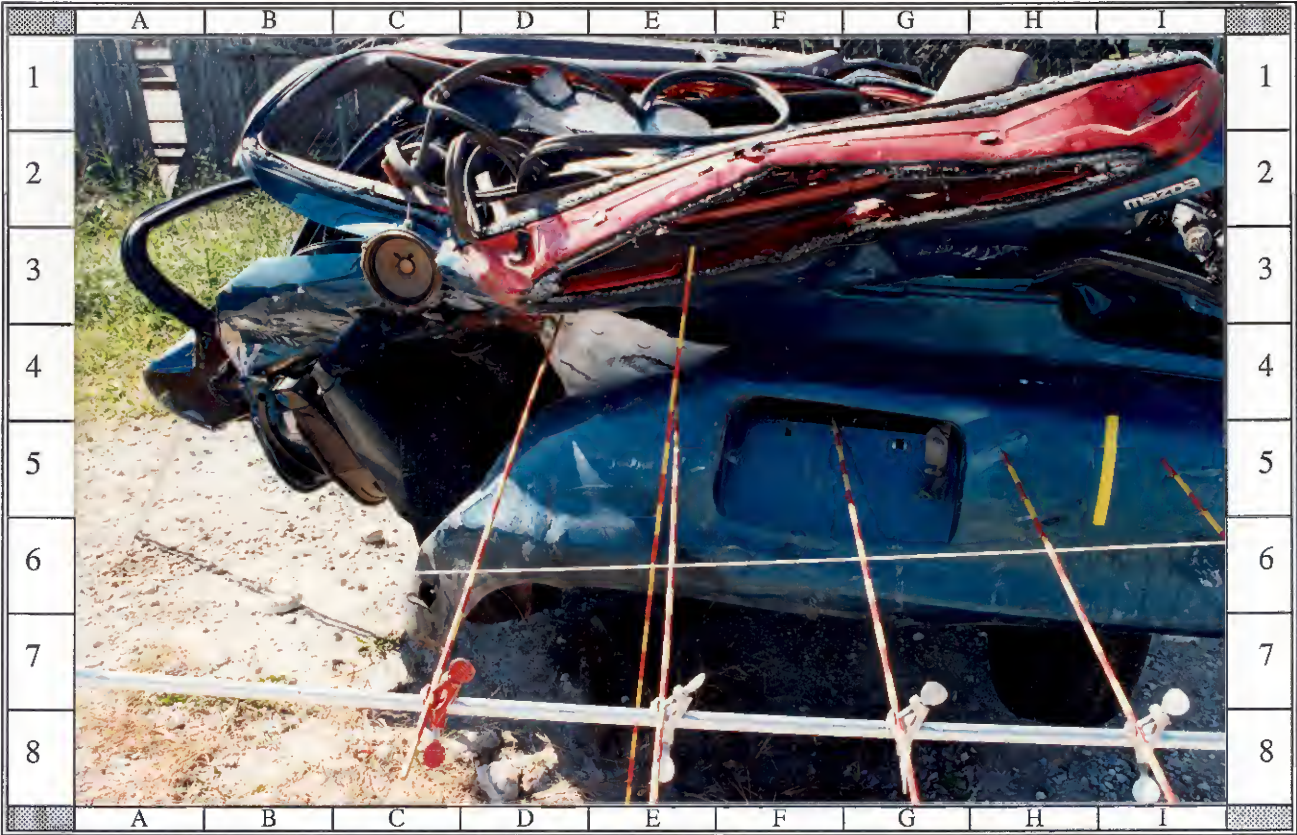


# 25: Case Vehicle's damaged back view from approximately 30 left of back without contour gauge present; NOTE: deformed left rear wheel assembly



# 26: Case Vehicle's severely damaged back with contour gauge present





# 27: Close-up of direct damage to Case Vehicle’s back; NOTE: direct damage extends leftward from yellow tape to bumper corner



# 28: Overhead view of Case Vehicle’s damaged back showing extensive deformation, primarily to back left





# 29: Case Vehicle's severely damaged back view from approximately 30 degrees right of back with contour gauge present



# 30: Case Vehicle viewed from approximately 75 degrees right of back showing extrication damage to right front door





# 31: Case Vehicle's undamaged front viewed from ~45 degrees right of front; NOTE: crack to right lower windshield as passenger area was pushed forward into hood



# 32: Case Vehicle's undamaged front; NOTE: stress fracture to right lower windshield caused by severity of crash





# 33: Case Vehicle's undamaged front viewed from ~30 degrees left of front; NOTE: extrication damage to driver's door and indirect damage to left fender



# 34: Case Vehicle's back damage viewed from left; NOTE: extensive crush to left rear corner





# 35: Direct damage to Case Vehicle's undercarriage viewed from ~15 degrees left of back without contour gauge present; NOTE: vertical component of crush



# 36: Close-up of direct damage to Case Vehicle's undercarriage showing vertical component of crush; NOTE: letters highlight contacted areas



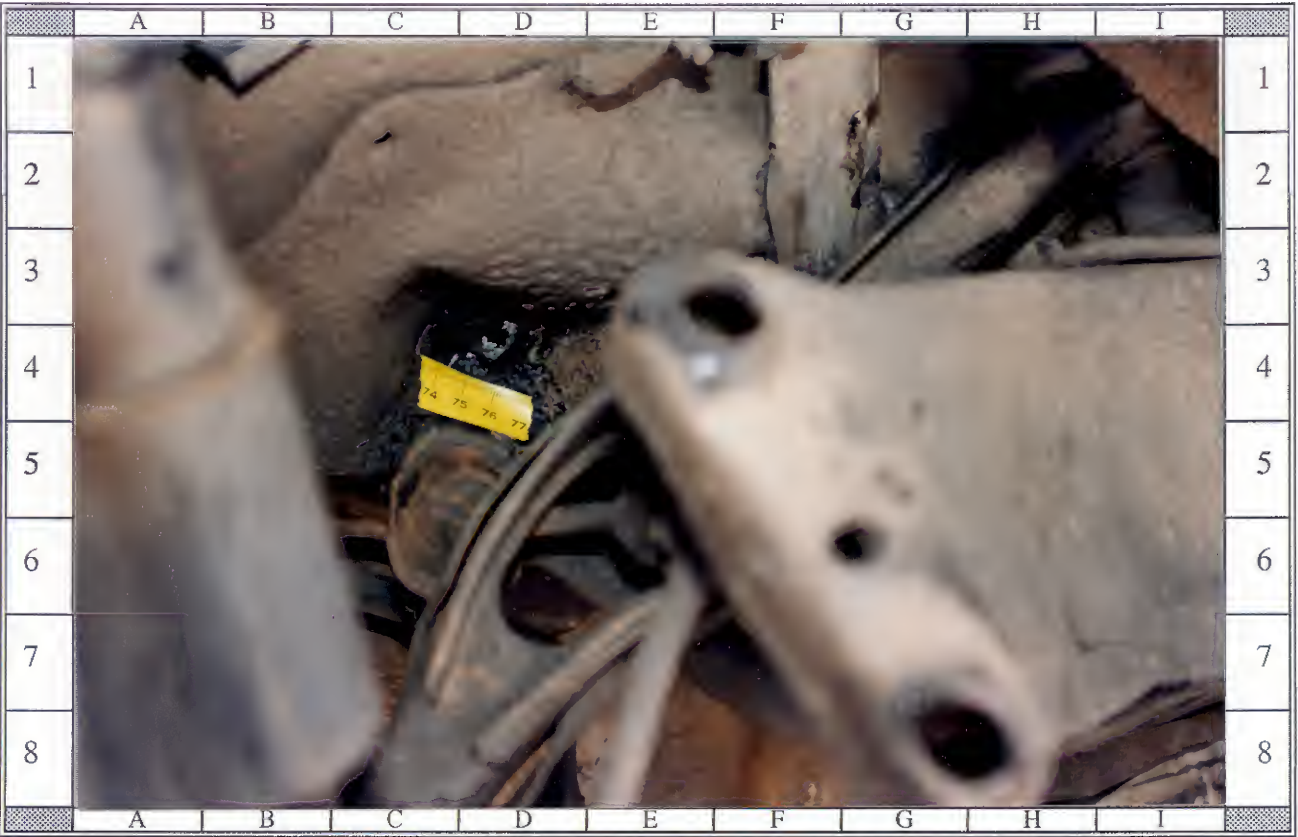


# 37: Closer-up view of direct damage to Case Vehicle's undercarriage (i.e., left rear strut "H" and rear cross member "E")



# 38: Close-up view of direct contact damage to Case Vehicle's undercarriage (i.e., muffler "F")





# 39: Closest-up view of puncture hole to Case Vehicle’s gas tank (i.e., yellow tape); compare with photograph #37 above

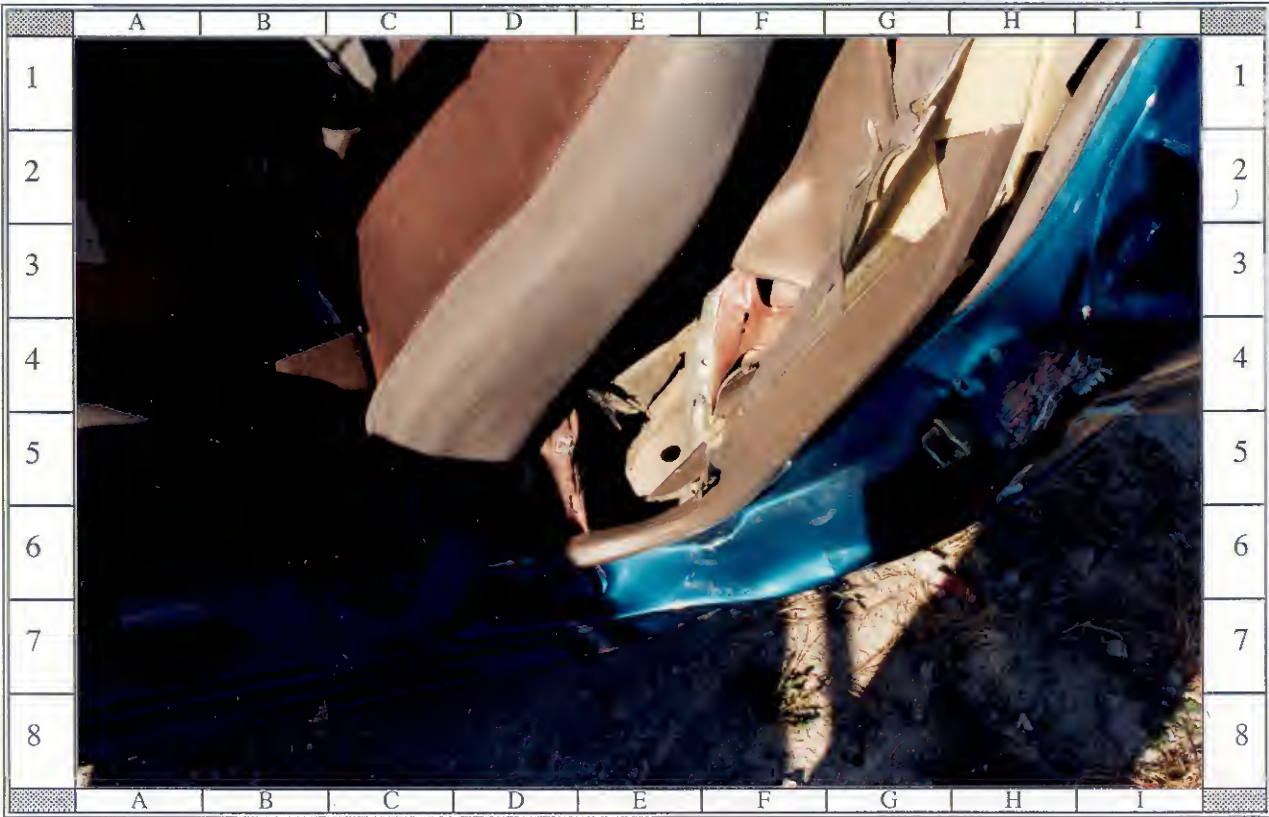


# 40: Case Vehicle’s damaged back viewed from approximately 15 degrees left of back with contour gauge present; compare with photograph #35 above





# 41: Case Vehicle's left door sill and left "B"-pillar area showing intrusion from left rear wheel; NOTE: extrication marks on door frame

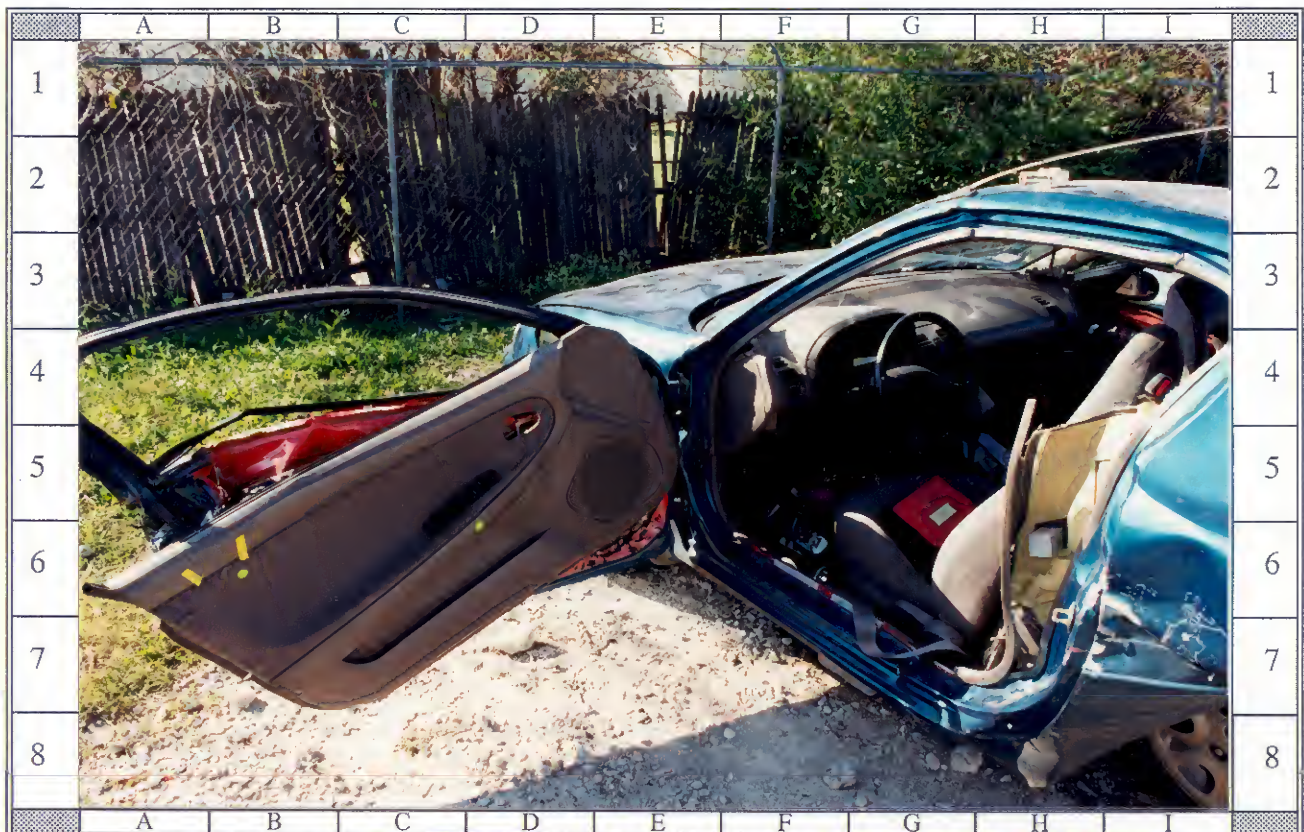


# 42: Vertical close-up of Case Vehicle's driver side door frame and "B"-pillar area showing damage caused by rear wheel intrusion and failure of welds





# 43: Close-up of Case Vehicle's driver side door showing latch that was torn away during extrication



# 44: Interior surface of Case Vehicle's driver side door showing highlighted contacts to door panel (yellow tape and green dots)





# 45: Close-up of skin transfer to Case Vehicle's driver side door panel just below window

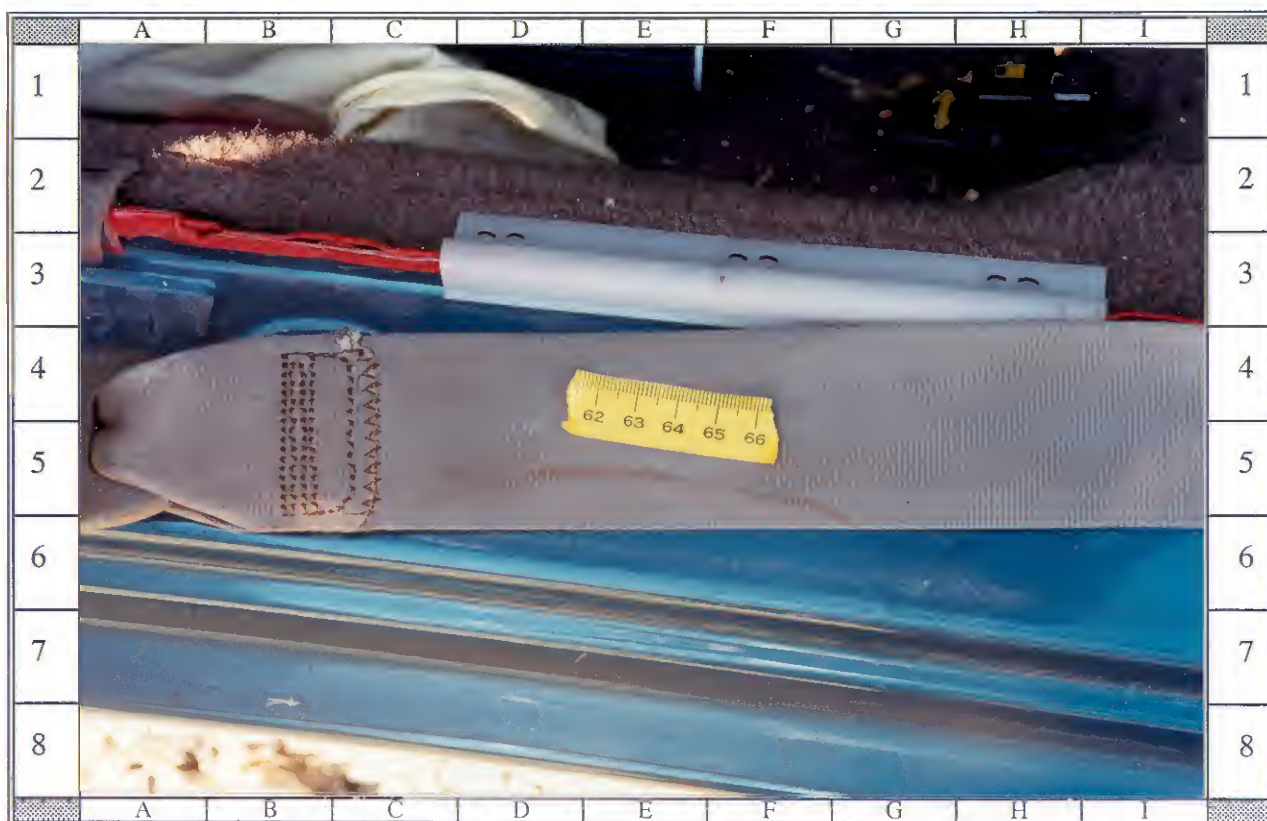


# 46: Close-up of skin transfer to Case Vehicle's driver side door panel just below arm rest



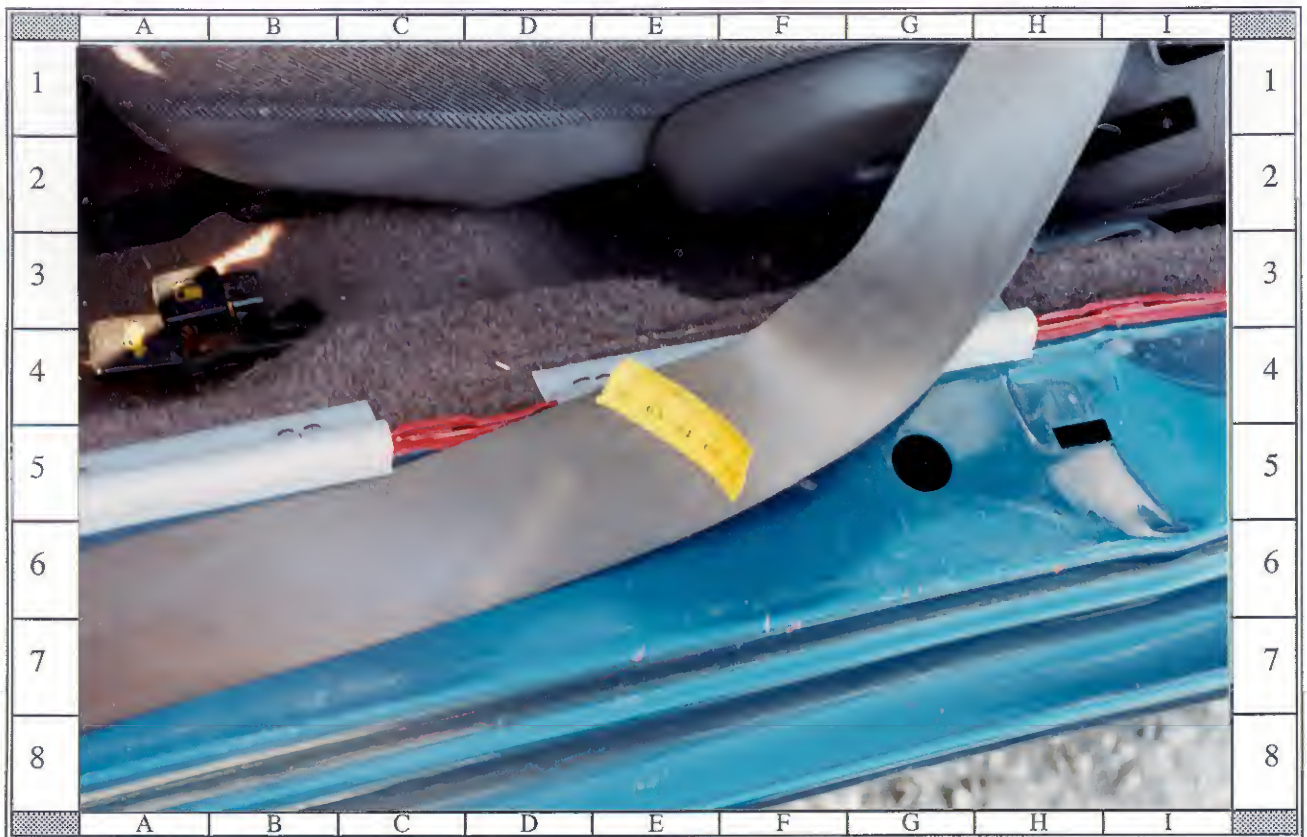


# 47: Case Vehicle's driver side, two-point, manual lap (cells F8--G5) and motorized shoulder (cells D4--E7) belts; NOTE: motorized belt cut, manual won't retract

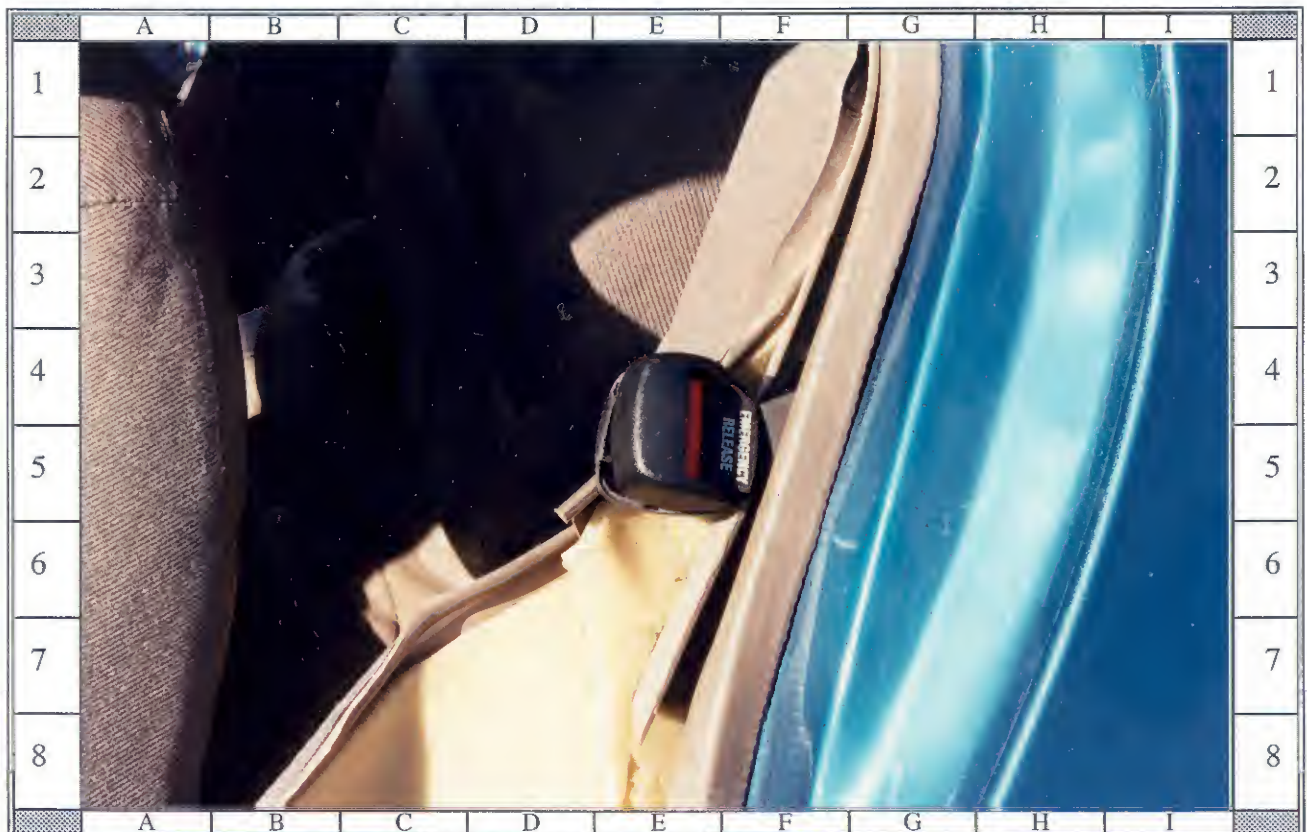


# 48: Close-up of blood smear on webbing of Case Vehicle's driver side, manual, two-point, lap belt



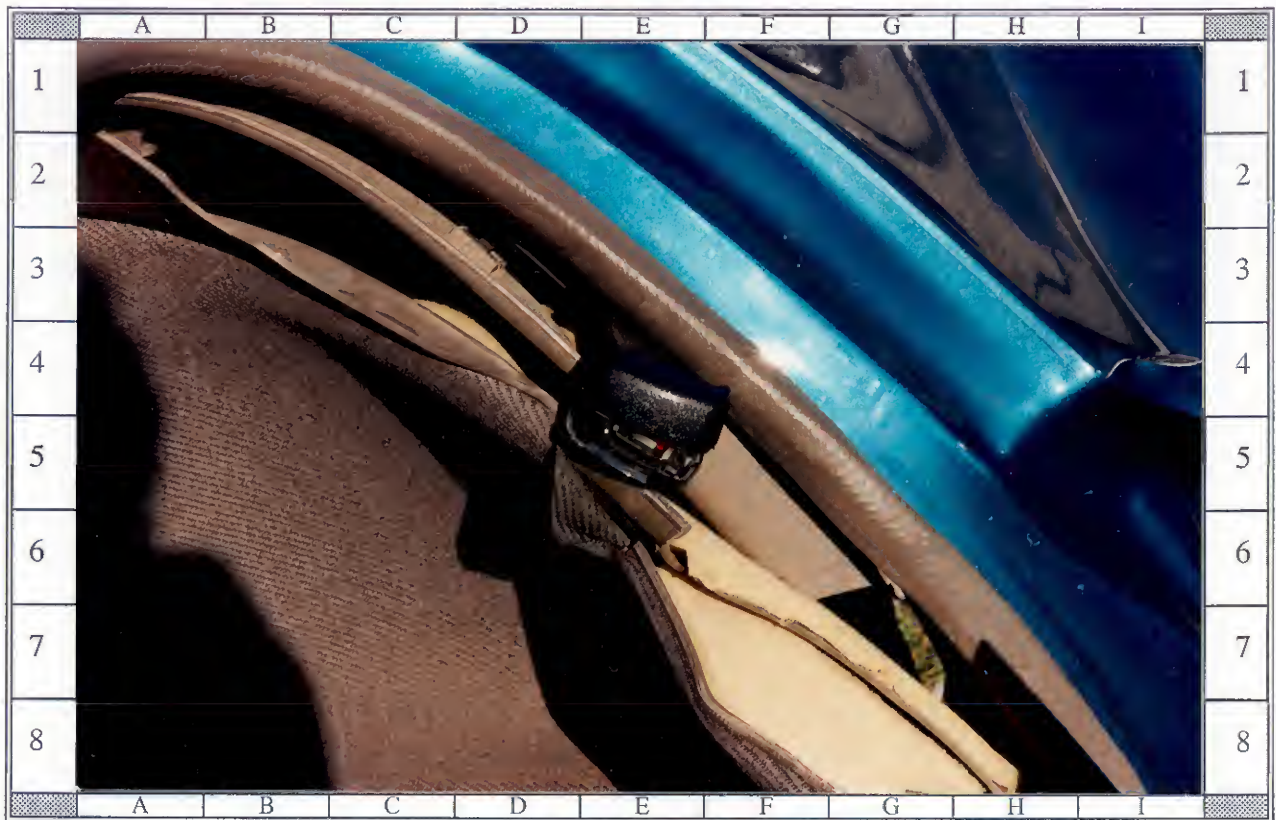


# 49: Close-up of possible skin transfer to webbing of Case Vehicle's driver side, manual, two-point, lap belt



# 50: Close-up of Case Vehicle's broken driver side motorized torso belt connector viewed from left; compare with photograph #41





# 51: Close-up of Case Vehicle's broken driver side motorized torso belt connector viewed from front



# 52: Case Vehicle's front seating area viewed from left front showing intrusion to front seatbacks from rear seat



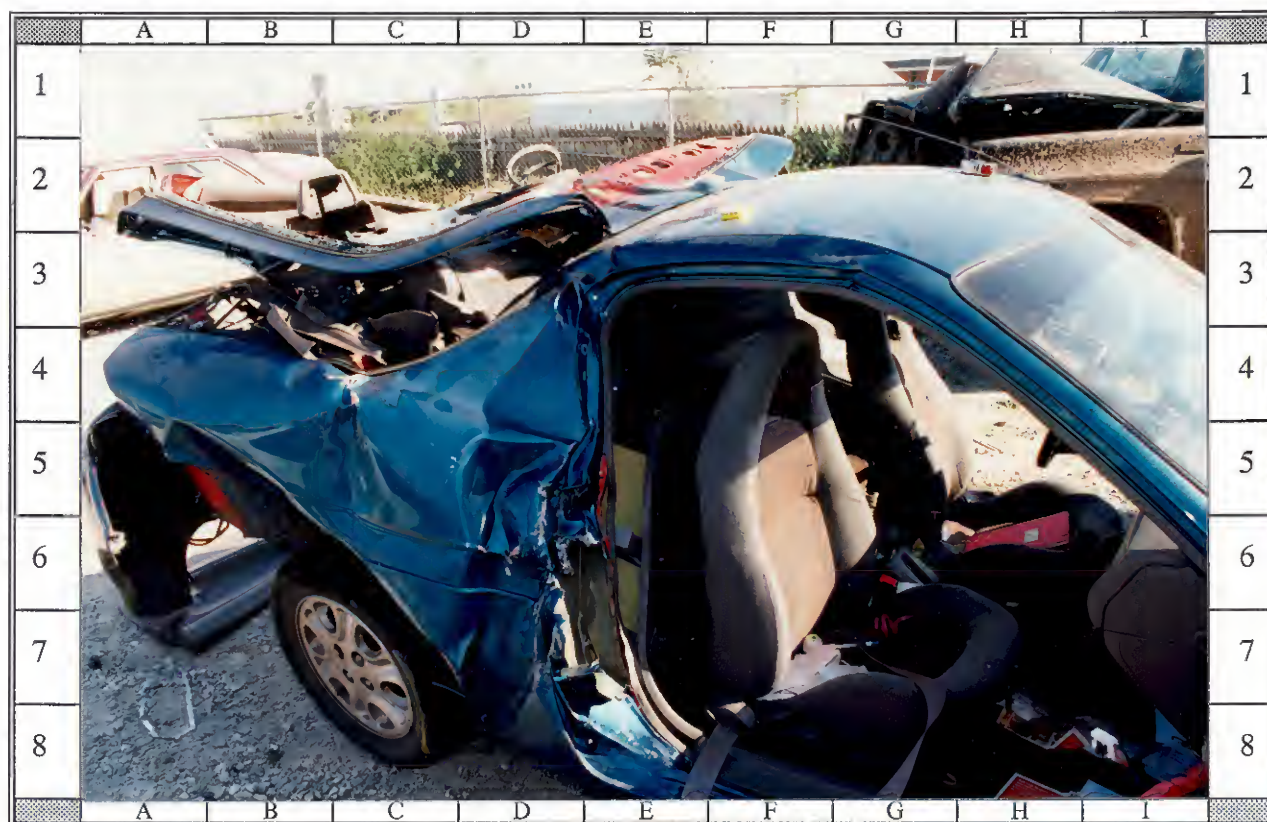


# 53: Case Vehicle's front seating area; NOTE: no visible contacts to front dash or windshield and no evidence of loading on steering wheel



# 54: Case Vehicle's overhead map light that popped out as a result of this vehicle's severe impact



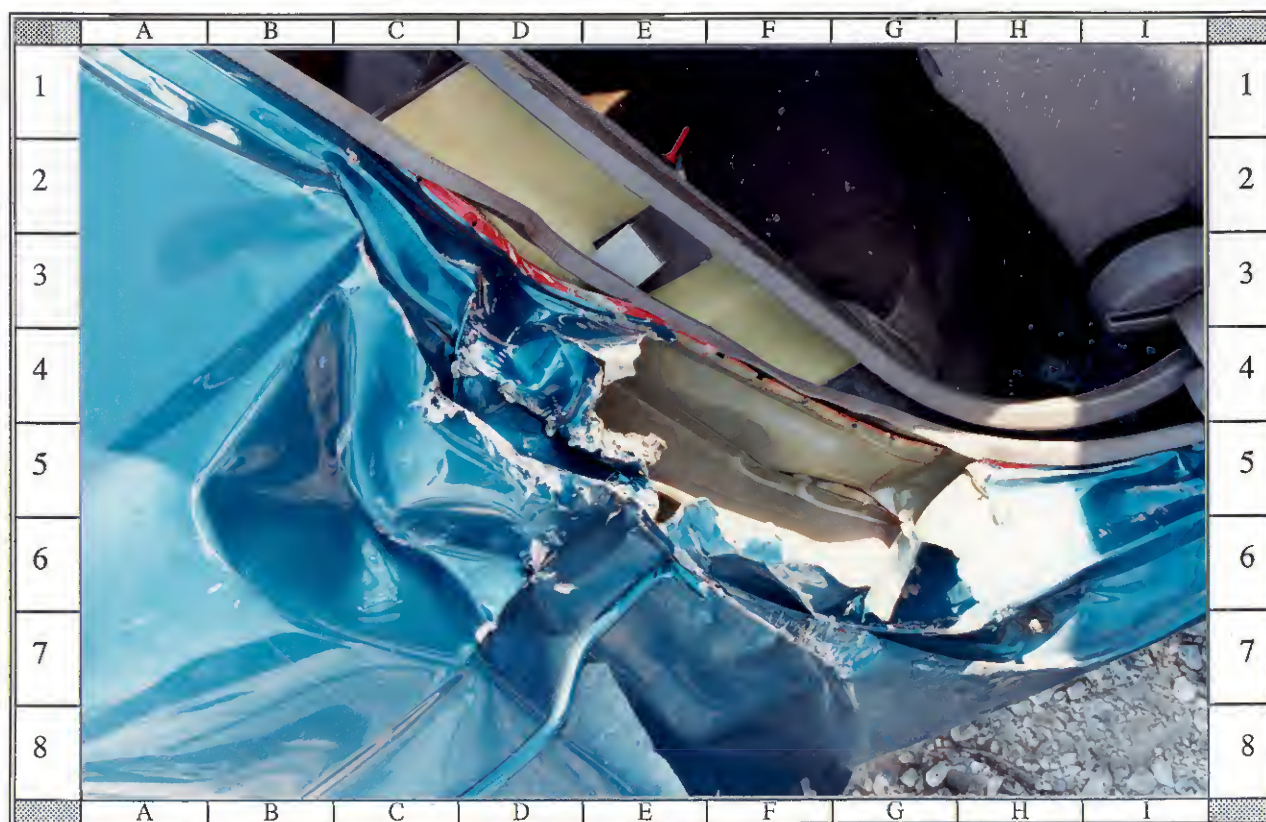


# 55: Case Vehicle's severe back damage and right front passenger seating area viewed from right front showing intrusion to right front seatback

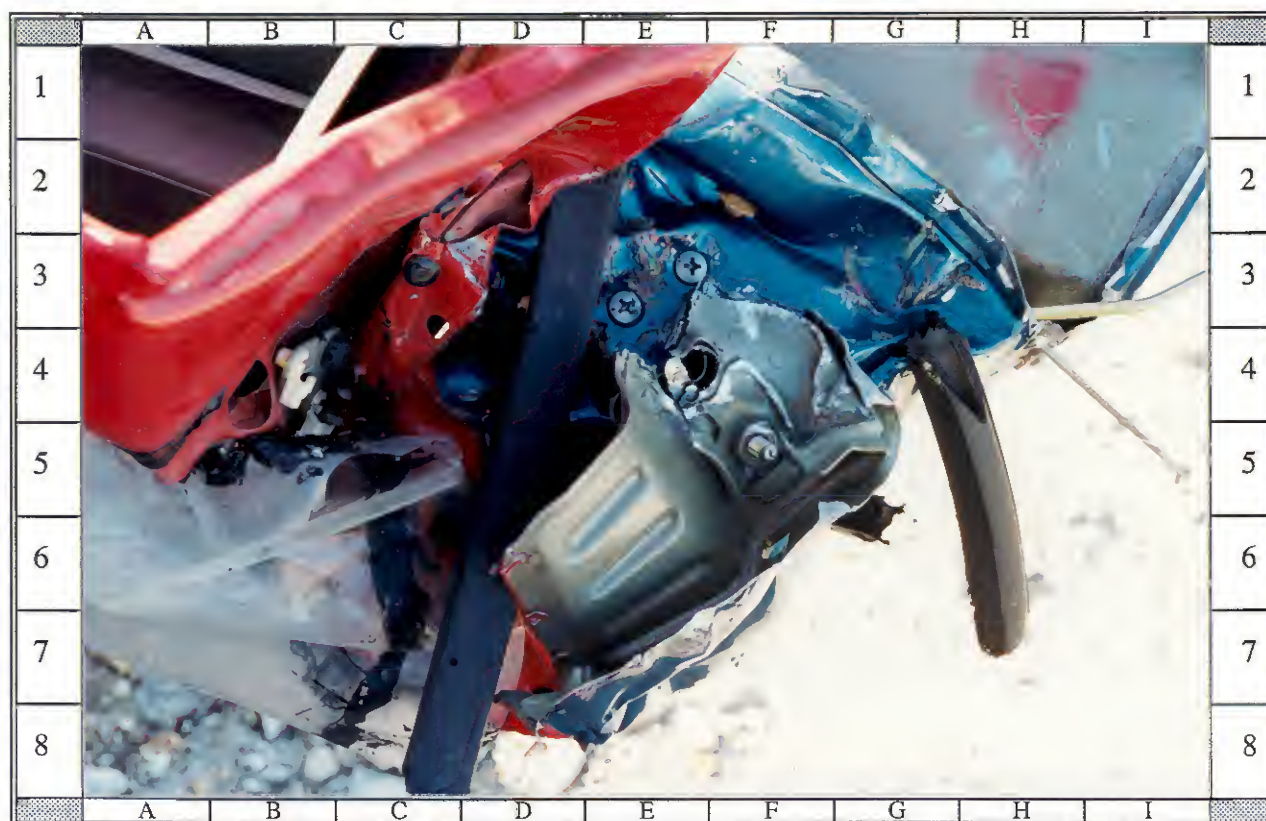


# 56: Closer-up view of Case Vehicle's right front passenger seating area showing intrusion to right front seatback and damaged right "B"-pillar due to extrication





# 57: Close-up of Case Vehicle's missing right front door striker plate which was torn off during extrication



# 58: Close-up of Case Vehicle's right front door striker which is still connected to right front door latch; compare with next photograph





# 59: Case Vehicle's front seating area and interior of damaged right front door showing manual, lap belt (cells D6--D8) and motorized, torso belt (cells E5--E7)

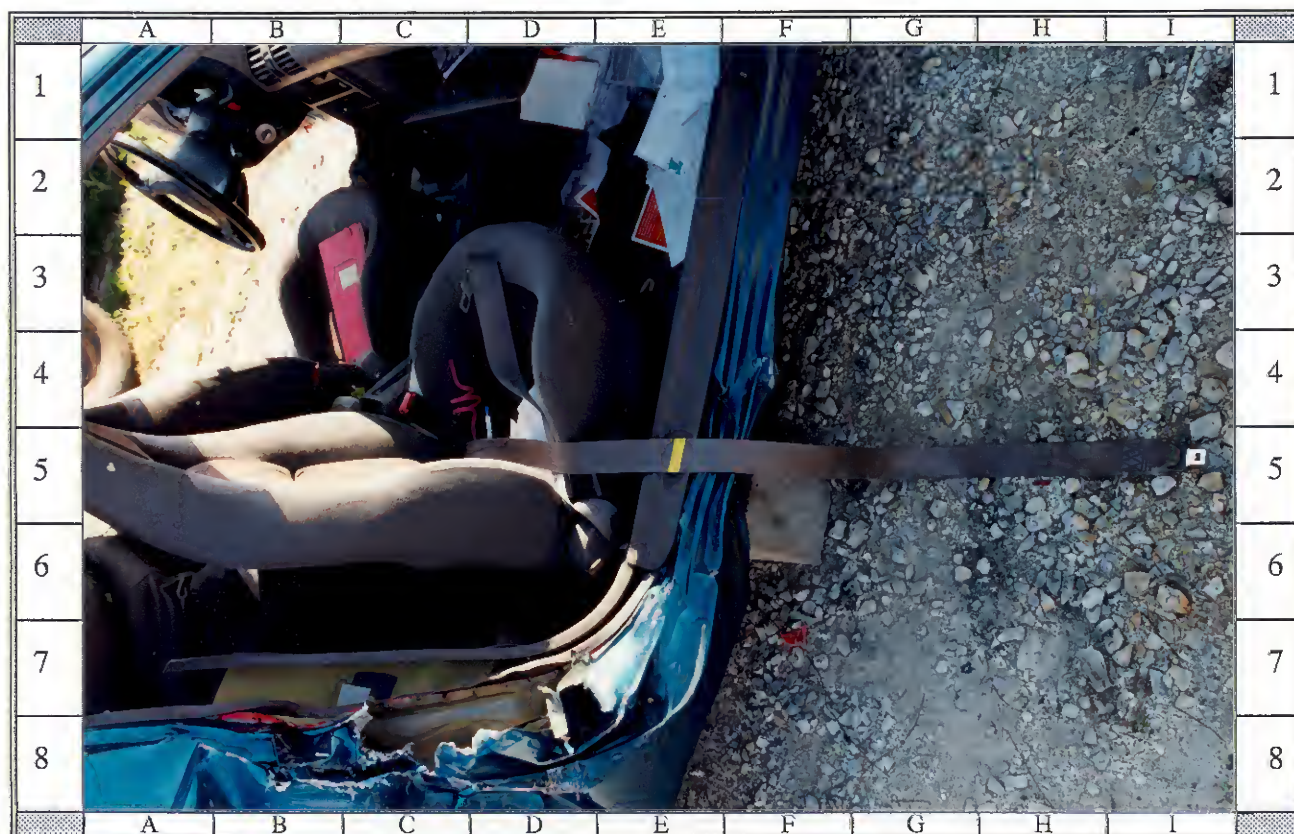


# 60: Close-up of missing interior panel to Case Vehicle's right front door; NOTE: no visible contacts found





# 61: Case Vehicle's center console, floor-mounted, automatic, transmission selector lever, and right lower dash; NOTE: no evidence of contact



# 62: Case Vehicle's disconnected, motorized, torso belt; NOTE: skin transfer to belt webbing (yellow tape)





# 63: Close-up of skin transfer to Case Vehicle’s disconnected, motorized, torso belt webbing



# 64: Case Vehicle’s rear roof, viewed from just behind right front passenger’s seat, showing extensive intrusion; NOTE: head contacts to roof (green dots)

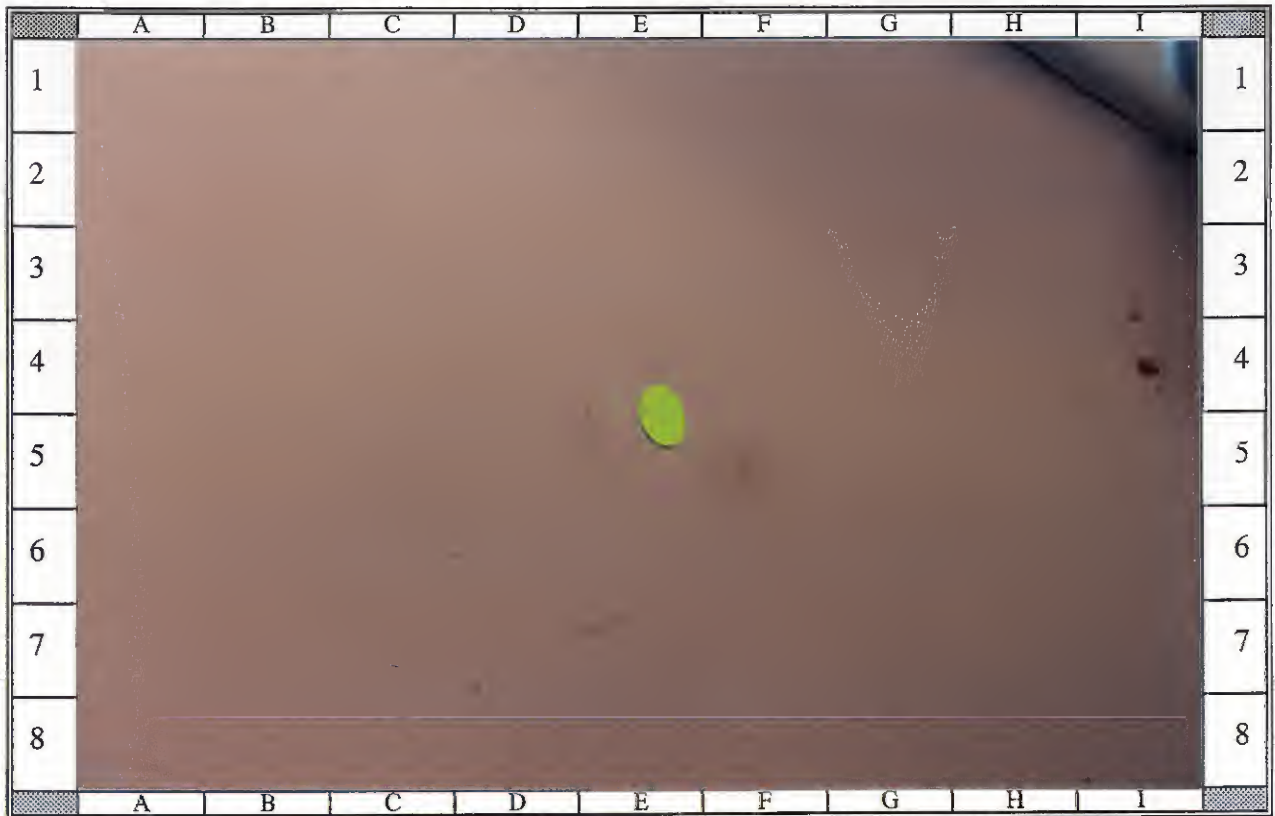


# 65: Vertical close-up of head contact to rear roof from Case Vehicle's right front passenger; NOTE: rear seat has been deformed upward to meet roof



# 66: Vertical close-up of head contact (green dot) to rear roof from Case Vehicle's driver





# 67: Vertical close-up view of head contact (green dot) to rear roof from Case Vehicle's driver



# 68: Case Vehicle's left rear hatchback area viewed from left back showing extensive intrusion; NOTE: left rear passenger's seatbelt retractor (cells E4--E5)





# 69: Case Vehicle's right rear hatchback area viewed from right back showing extensive intrusion; NOTE: right rear passenger's seatbelt retractor (cells D4--D5)



# 70: 1992 Cadillac DeVille's frontal damage without contour gauge present





# 71: Vehicle #2's frontal damage with contour gauge showing crush at bumper level



# 72: Vehicle #2's frontal damage with contour gauge showing crush above bumper level



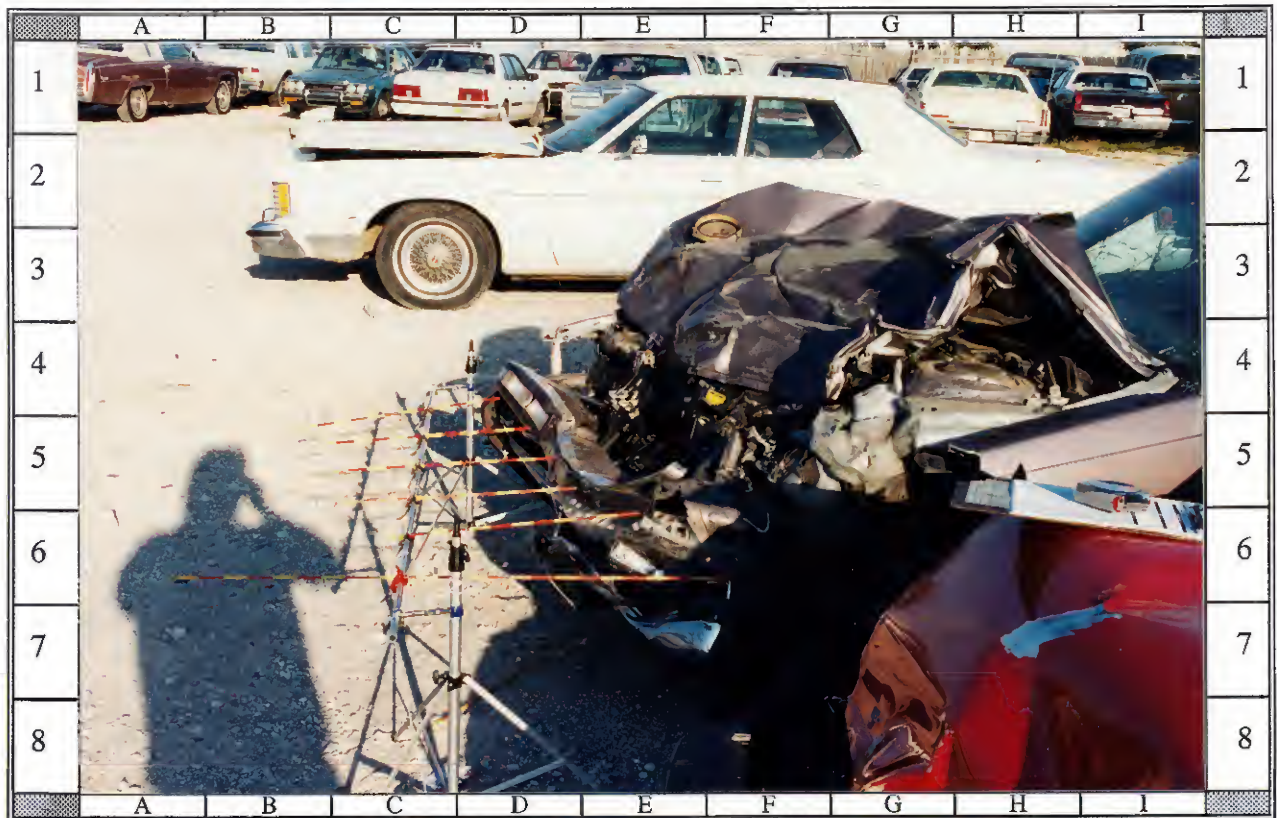


# 73: Overhead view of Vehicle #2's frontal damage; NOTE: uneven damage pattern resulting from underride



# 74: Vehicle #2's frontal damage viewed from approximately 30 degrees left of front with contour gauge at bumper level





# 75: Reference line view of Vehicle #2's frontal damage from left with contour gauge at bumper level



# 76: Reference line view of Vehicle #2's frontal damage from left with contour gauge positioned above bumper





# 77: Vehicle #2's restricted left front tire showing direct contact to side wall



# 78: Vehicle #2's undamaged left side (behind left "A"-pillar) and back viewed from approximately 30 degrees left of back





# 79: Vehicle #2's undamaged right side (behind right "A"-pillar) and back viewed from approximately 30 degrees right of back



# 80: Vehicle #2's cracked windshield from right; NOTE: hood pushed into windshield





# 81: Reference line view of Vehicle #2's damaged front from right with contour gauge at bumper level



# 82: Closer-up reference line view of Vehicle #2's damaged front from right with contour gauge positioned above bumper





# 83: Vehicle #2's frontal damage with contour at bumper level viewed from approximately 30 degrees right of front



# 84: Vehicle #2's driver seating area and interior surface of driver's door; NOTE: green dots on air bag indicate area of driver contact





# 85: Vehicle #2's left lower dash area showing driver's left knee contact



# 86: Vehicle #2's driver side air bag showing areas of contact and blood spots (i.e., green dots); NOTE: windshield cracked by hood (see photograph #80 above)





# 87: Top cover flap from Vehicle #2's driver side air bag module showing unknown scuffing



# 88: "D"-ring and left "B"-pillar cover from Vehicle #2's driver side safety belt;  
NOTE: "B"-pillar's cover was removed by this investigator



# 89: Close-up of Vehicle #2's driver side "B"-pillar cover showing wear mark or possible friction mark to "B"-pillar cover from driver's safety belt



# 90: Vehicle #2's driver side safety belt webbing and latch plate; NOTE: blood smear just above stitching on right (see arrow in cell E5)





# 91: Vehicle #2's front seating area from outside right front passenger door; NOTE: interior littered with debris



# 92: Vehicle #2's front seating area from behind driver seat; NOTE: driver seat bent back during driver removal

TRANSPORTATION RESEARCH CENTER

Indiana University  
Bloomington, Indiana 47403-1599

**ON-SITE PASSIVE BELT INVESTIGATION**

NASS CDS FORMS AND MEDICAL RECORDS

CASE NO. - 96-23  
FLEET - PRIVATE VEHICLE  
LOCATION -  
ACCIDENT DATE - 1996

Submitted By:

Senior Staff Associate  
and

Associate Scientist

1997

Contract Number: DTNH22-94-D-17058

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003



**POLICE ACCIDENT REPORT**

INCIDENT REPORT ☐ REVISED REPORT ☐ FATALITY - YES ☒  
 INVESTIGATION COMPLETED? ☒ YES ☐ NO Sheet 1 of 3 Sheets

DO NOT WRITE IN THIS SPACE

## TRAFFIC COLLISION REPORT

REPORTING AGENCY:															ACCIDENT NUMBER					ALTERNATIVE				
MONTH		DAY		YEAR		24 HOUR TIME			DAY OF WEEK			COUNTY		COUNTY NUMBER										
STREET, ROAD OR HIGHWAY										DISTANCE FROM		N S E W			(NEAREST) INTERSECTING STREET, ROAD OR HIGHWAY									
BY CITY		NEAR CITY		NAME OF NEAREST CITY OR TOWN										CITY NUMBER		DISTANCE FROM NEAREST CITY OR TOWN LIMITS			N S		E W			
HIGHWAY CLASS		STATE HIGHWAY CODE		CONTROL NUMBER		INTERSECTION I.D.		LOCATION		COUNTY SECTION LINE CROSS		EAST		NORTH		RAILROAD CROSSING NUMBER								
MOTOR VEHICLES INVOLVED		3		NUMBER KILLED		2		NUMBER INJURED		3		ADMINISTRATIVE												
UNIT		1		OCCUPANTS		2		DRIVER		X		PEDESTRIAN		ANIMAL		TRAIN		OTHER		COMMERCIAL MOTOR VEHICLE		HAZ. MAT. PLACARD		
NAME LAST		1		FIRST		2		MIDDLE		X		STREET/RFD		CITY		STATE		ZIP						
DOB MO/DAY/YR		F		SEX		F		DRIVER LICENSE NUMBER				STATE		CLASS		D		ENDORSEMENT(S)		RESTRICTION(S)		PHONE		
INJURY SEVERITY		4		TYPE OF INJURY		1 2 3 4 5		INJURED TAKEN BY				SAFETY EQUIPMENT IN USE		4		AIR BAG DEPLOYED?		Y N						
EJECTED?		Y N		PINNED?		Y N		CHEMICAL TEST		RESULTS		D+		X BRAC		DRIVER/PEDESTRIAN CONDITION		1		TOWED VEHICLE (DESCRIBE)				
VEH YEAR		COLOR		MAKE		MODEL		STYLE		SIZE		VIN		M		LICENSE PLATE NO		NO/YR		STATE		NUMBER		
OWNER'S NAME SAME AS DRIVER		LAST		FIRST		MIDDLE		STREET/RFD		CITY		STATE		ZIP										
SECURITY VERIFICATION		2		INSURANCE COMPANY		NAME		POLICY NO																
FROM MO DAY YR		TO MO DAY YR		AGENT NAME		ADDRESS		CITY		STATE		ZIP												
VEH REMOVED BY		DRIVER		LEGAL SPEED		60		BEFORE CONTACT		CONTACT		ESTIMATED DAMAGE		6000.00		BURNED?		Y N						
STATUTE/ORDINANCE NUMBER		CITATION NUMBER		STATUTE/ORDINANCE NUMBER		CITATION NUMBER		STATUTE/ORDINANCE NUMBER		CITATION NUMBER														
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DIRECTION OF TRAVEL  
 UNIT 1  
 UNIT 2  
 VISIBILITY  
 OBSERVED BY  
 NONE

UNIT-1 WAS SOUTHBOUND IN THE CENTER LANE OF	UNIT-2 WAS NORTHBOUND IN THE RIGHT LANE
OF	UNIT-A WAS SOUTHBOUND CHANGING FROM THE RIGHT LANE TO THE CENTER LANE OF
UNIT-1 SWERVED LEFT TO AVOID A COLLISION WITH UNIT-A. UNIT-1 LOST CONTROL AND STARTED INTO A	
LEFT YAW AND TRAVELED SOUTHEAST THROUGH THE CENTER MEDIAN AND INTO THE NORTHBOUND LANES ROTATING	
COUNTER-CLOCKWISE AND COLLIDED REAR LEFT WITH UNIT-2'S FRONT LEFT. UNIT-1 RESTED 15 FEET NORTH NORTH	
EAST OF IMPACT HEADED SOUTH WEST. UNIT-2 RESTED 25 FEET NORTH EAST OF IMPACT HEADED NORTH EAST.	

TELEPHONE INSTALLED?		UNIT 1		UNIT 2		IN USE?		UNIT 1		UNIT 2		INVESTIGATION MADE AT SCENE?		Y		N		HIT AND RUN?		Y		N		PHOTOGRAPHS TAKEN?		X		N		OVERSIZE VEHICLE		P		C																																																													
WHAT VEHICLE(S) WERE GOING TO DO																																WHAT VEHICLE(S) DID																																TRAFFIC CONTROL																															
1. GO AHEAD 2. TURN LEFT 3. TURN RIGHT 4. MAKE "U" TURN 5. STOP 6. SLOW FOR CAUSE 7. START FROM PARK 8. CHANGE LANES 9. OVERTAKE 10. PASS 11. BACK 12. REMAIN STOPPED 13. REMAIN PARKED 14. OTHER <u>EXPLAIN</u>																																1. WENT AHEAD 2. TURNED LEFT 3. TURNED RIGHT 4. SWERVED LEFT 5. SWERVED RIGHT 6. ENTERED "U" TURN 7. STOPPED 8. STARTED FROM PARK 9. ENTERED OTHER LANE 10. OVERTAKING 11. PASSING 12. BACKED 13. REMAINED STOPPED 14. REMAINED PARKED 15. RAN OFF ROADWAY-RIGHT 16. RAN OFF ROADWAY-LEFT 17. OTHER <u>EXPLAIN</u>																																1. STOP SIGN 2. TRAFFIC SIGNAL 3. FLASHING SIGNAL 4. YIELD SIGN 5. WARNING SIGN (TYPE BY REMARKS) 6. RAILROAD ADVANCE WARNING SIGN 7. RAILROAD CROSSBUCKS 8. RAILROAD GATES 9. RAILROAD SIGNAL 10. NO PASSING ZONE 11. OFFICER 12. NO CONTROL 13. ABNORMAL CONTROL 14. OTHER <u>EXPLAIN</u>																															
TYPE OF ROAD																																ROAD CHARACTER																																OBJECT STRUCK BY VEHICLE OR LOAD ON FIRST CONTACT																															
1. ONE-WAY ROAD 2. ALLEY 3. TWO LANES 4. THREE LANES 5. FOUR OR MORE (ARROWS) 6. FOUR OR MORE (ARROWS) 7. DRIVEWAY 8. TURN BAY 9. ON RAMP 10. OFF RAMP 11. CONSTRUCTION ZONE 12. OTHER <u>EXPLAIN</u>																																1. STRAIGHT-LEVEL 2. STRAIGHT-UPGRADE 3. STRAIGHT-DOWNGRADE 4. STRAIGHT-HILLCREST 5. CURVE-LEVEL 6. CURVE-UPGRADE 7. CURVE-DOWNGRADE 8. CURVE-HILLCREST 9. OTHER <u>EXPLAIN</u>																																1. FENCE POLE 2. UTILITY POLE 3. GUARD RAIL 4. GUARD RAIL END 5. GUARD POST 6. CULVERT 7. TRAFFIC SIGNAL 8. BARRIER 9. CURB 10. ISLAND 11. TRAFFIC CONTROL SIGN 12. SAND BARRELS 13. ATTENUATORS 14. PAVEMENT DROP OFF 15. DITCH 16. EMBANKMENT 17. TREE 18. DIVIDING STRIP 19. RETAINING WALL 20. FENCE 21. BRIDGE ABUTMENT 22. BRIDGE PIER 23. BRIDGE RAIL 24. BRIDGE POST 25. BRIDGE CURBS 26. BRIDGE SUPERSTRUCTURE (BEAMS) 27. OTHER HIGHWAY STRUCTURE (EXPLAIN BY REMARKS) 28. OTHER <u>EXPLAIN</u>																															
WEATHER																LIGHT																LOCALITY																ROAD SURFACE																ROAD CONDITION																															
1. CLEAR 2. FOG 3. CLOUDS PRESENT 4. RAINING 5. SHOWING 6. OTHER <u>EXPLAIN</u>																1. DAYLIGHT 2. DARKNESS 3. LIGHTED 4. DAWN 5. DUSK 6. OTHER <u>EXPLAIN</u>																1. RESIDENTIAL 2. BUSINESS 3. INDUSTRIAL 4. SCHOOL 5. NOT BUILT UP 6. OTHER <u>EXPLAIN</u>																1. CONCRETE 2. ASPHALT 3. GRAVEL 4. DIRT 5. OTHER <u>EXPLAIN</u>																1. DRY 2. WET 3. ICE 4. SHOW 5. MUDDY 6. OTHER <u>EXPLAIN</u>																															
POINT OF FIRST CONTACT ON VEHICLE																																VEHICLE CONDITION																																PEDESTRIAN ACTION																															
TOP _____ BOTTOM _____ 1 2 3 4 5 6 7 8 9 10 11 12 UNIT 1 <u>6</u> UNIT 2 <u>10</u>																																1. APPARENTLY NORMAL 2. BRAKES 3. HEADLIGHTS 4. STEERING 5. TAIL LIGHTS 6. BRAKE LIGHTS 7. TIRES/WHEELS 8. SUSPENSION 9. OTHER <u>EXPLAIN</u>																																1. CROSSING AT INTERSECTION 2. CROSSING/HOT AT INTERSECTION 3. CROSSING/AT OTHER CROSSWALK 4. GETTING ON VEHICLE 5. GETTING OFF VEHICLE 6. WALKING WITH TRAFFIC 7. WALKING AGAINST TRAFFIC 8. PUSH ON VEHICLE 9. WORK ON VEHICLE 10. PLAYING 11. OTHER WORK 12. OTHER <u>EXPLAIN</u>																															
UNSAFE, UNLAWFUL OR OTHER ACTION (THIS SECTION PRIMARILY FOR GENERAL STATISTICAL AND ADMINISTRATIVE PURPOSES)																																BLOCKS 1 THRU 10 MUST BE DESCRIBED WHEN CHECKED																																																															
UNIT 1 2 1. FAILED TO YIELD/STOP 2. FOLLOWED TOO CLOSELY 3. UNSAFE SPEED 4. MADE IMPROPER TURN 5. CHANGE LANES UNSAFELY UNIT 1 2 6. UNSAFE VEHICLE 7. LEFT OF CENTER/PASSING 8. NO IMPROPER ACTION 9. PEDESTRIAN/BICYCLE ACTION 10. OTHER (DESCRIBE)																																UNIT 1 2 1. NO IMPROPER ACTION																																																															

INCIDENT REPORT ☐ REVISED REPORT ☐ FATALITY — YES ☒

**DO NOT WRITE IN THIS SPACE**

INVESTIGATION COMPLETED? ☒ YES ☐ NO Sheet 2 of 3 Sheets

# TRAFFIC COLLISION REPORT

REPORTING OFFICER: \_\_\_\_\_

MONTH \_\_\_\_\_ DAY \_\_\_\_\_ YEAR \_\_\_\_\_ 24 HOUR TIME \_\_\_\_\_ DAY OF WEEK \_\_\_\_\_ COUNTY \_\_\_\_\_ COUNTY NUMBER \_\_\_\_\_

STREET, ROAD OR HIGHWAY \_\_\_\_\_ DISTANCE FROM \_\_\_\_\_ (NEAREST) INTERSECTING STREET, ROAD OR HIGHWAY \_\_\_\_\_

IN CITY \_\_\_\_\_ NEAR CITY \_\_\_\_\_ NAME OF NEAREST CITY OR TOWN \_\_\_\_\_ CITY NUMBER \_\_\_\_\_ DISTANCE FROM NEAREST CITY OR TOWN LIMITS \_\_\_\_\_

HIGHWAY CLASS \_\_\_\_\_ STATE HIGHWAY CODES \_\_\_\_\_ CONTROL NUMBER \_\_\_\_\_ INTERSECTION L.D. \_\_\_\_\_ LOCATION \_\_\_\_\_ COUNTY SECTION LINE CROSS \_\_\_\_\_ EAST \_\_\_\_\_ NORTH \_\_\_\_\_ RAILROAD CROSSING NUMBER \_\_\_\_\_

MOTOR VEHICLES INVOLVED \_\_\_\_\_ 3 \_\_\_\_\_ NUMBER KILLED \_\_\_\_\_ 2 \_\_\_\_\_ NUMBER INJURED \_\_\_\_\_ 3 \_\_\_\_\_ ADMINISTRATIVE \_\_\_\_\_

UNIT \_\_\_\_\_ OCCUPANTS \_\_\_\_\_ DRIVER \_\_\_\_\_ PEDESTRIAN \_\_\_\_\_ ANIMAL \_\_\_\_\_ TRAIN \_\_\_\_\_ OTHER \_\_\_\_\_ COMMERCIAL MOTOR VEHICLE \_\_\_\_\_ HAZ. MAT. PLACARD \_\_\_\_\_

NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE \_\_\_\_\_ STREET/RFD \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

DOB NO./DAY/YR \_\_\_\_\_ SEX \_\_\_\_\_ DRIVER LICENSE NUMBER \_\_\_\_\_ STATE \_\_\_\_\_ CLASS \_\_\_\_\_ ENDORSEMENT(S) \_\_\_\_\_ RESTRICTION(S) \_\_\_\_\_ PHONE \_\_\_\_\_

INJURY SEVERITY \_\_\_\_\_ TYPE OF INJURY \_\_\_\_\_ INJURED TAKEN BY \_\_\_\_\_ SAFETY EQUIPMENT IN USE \_\_\_\_\_ AIR BAG DEPLOYED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

EJECTED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ PINNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ CHEMICAL TEST \_\_\_\_\_ RESULTS \_\_\_\_\_ DRIVER/PEDESTRIAN CONDITION \_\_\_\_\_ TOWED VEHICLE (DESCRIBE) \_\_\_\_\_

VEH YEAR \_\_\_\_\_ COLOR \_\_\_\_\_ MAKE \_\_\_\_\_ MODEL \_\_\_\_\_ STYLE \_\_\_\_\_ SIZE \_\_\_\_\_ VIN \_\_\_\_\_ LICENSE PLATE NO. \_\_\_\_\_ MO/YR \_\_\_\_\_ STATE \_\_\_\_\_ NUMBER \_\_\_\_\_

OWNER'S NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE \_\_\_\_\_ STREET/RFD \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SECURITY VERIFICATION \_\_\_\_\_ INSURANCE COMPANY \_\_\_\_\_ POLICY NO. \_\_\_\_\_

FROM MO DAY YR \_\_\_\_\_ TO MO DAY YR \_\_\_\_\_ AGENT NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

VEH REMOVED BY \_\_\_\_\_ DRIVER \_\_\_\_\_ LEGAL SPEED \_\_\_\_\_ BEFORE CONTACT \_\_\_\_\_ CONTACT \_\_\_\_\_ ESTIMATED DAMAGE \_\_\_\_\_ BURNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

STATUTE/ORDINANCE NUMBER \_\_\_\_\_ CITATION NUMBER \_\_\_\_\_ STATUTE/ORDINANCE NUMBER \_\_\_\_\_ CITATION NUMBER \_\_\_\_\_

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NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE \_\_\_\_\_ STREET/RFD \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

DOB NO./DAY/YR \_\_\_\_\_ SEX \_\_\_\_\_ DRIVER LICENSE NUMBER \_\_\_\_\_ STATE \_\_\_\_\_ CLASS \_\_\_\_\_ ENDORSEMENT(S) \_\_\_\_\_ RESTRICTION(S) \_\_\_\_\_ PHONE \_\_\_\_\_

INJURY SEVERITY \_\_\_\_\_ TYPE OF INJURY \_\_\_\_\_ INJURED TAKEN BY \_\_\_\_\_ SAFETY EQUIPMENT IN USE \_\_\_\_\_ AIR BAG DEPLOYED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

EJECTED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ PINNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ CHEMICAL TEST \_\_\_\_\_ RESULTS \_\_\_\_\_ DRIVER/PEDESTRIAN CONDITION \_\_\_\_\_ TOWED VEHICLE (DESCRIBE) \_\_\_\_\_

VEH YEAR \_\_\_\_\_ COLOR \_\_\_\_\_ MAKE \_\_\_\_\_ MODEL \_\_\_\_\_ STYLE \_\_\_\_\_ SIZE \_\_\_\_\_ VIN \_\_\_\_\_ LICENSE PLATE NO. \_\_\_\_\_ MO/YR \_\_\_\_\_ STATE \_\_\_\_\_ NUMBER \_\_\_\_\_

OWNER'S NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE \_\_\_\_\_ STREET/RFD \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SECURITY VERIFICATION \_\_\_\_\_ INSURANCE COMPANY \_\_\_\_\_ POLICY NO. \_\_\_\_\_

FROM MO DAY YR \_\_\_\_\_ TO MO DAY YR \_\_\_\_\_ AGENT NAME \_\_\_\_\_ ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

VEH REMOVED BY \_\_\_\_\_ DRIVER \_\_\_\_\_ LEGAL SPEED \_\_\_\_\_ BEFORE CONTACT \_\_\_\_\_ CONTACT \_\_\_\_\_ ESTIMATED DAMAGE \_\_\_\_\_ BURNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

STATUTE/ORDINANCE NUMBER \_\_\_\_\_ CITATION NUMBER \_\_\_\_\_ STATUTE/ORDINANCE NUMBER \_\_\_\_\_ CITATION NUMBER \_\_\_\_\_

INJURED WITNESS \_\_\_\_\_ PASSENGER NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE INITIAL \_\_\_\_\_ SEX \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_ DOB NO./DAY/YR \_\_\_\_\_

UNIT \_\_\_\_\_ INJURY SEVERITY \_\_\_\_\_ TYPE OF INJURY \_\_\_\_\_ SAFETY EQUIPMENT IN USE \_\_\_\_\_ AIR BAG DEPLOYED? \_\_\_\_\_ EJECTED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ PINNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ INJURED TAKEN BY \_\_\_\_\_ POS IN VEH \_\_\_\_\_

INJURED WITNESS \_\_\_\_\_ PASSENGER NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE INITIAL \_\_\_\_\_ SEX \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_ DOB NO./DAY/YR \_\_\_\_\_

UNIT \_\_\_\_\_ INJURY SEVERITY \_\_\_\_\_ TYPE OF INJURY \_\_\_\_\_ SAFETY EQUIPMENT IN USE \_\_\_\_\_ AIR BAG DEPLOYED? \_\_\_\_\_ EJECTED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ PINNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ INJURED TAKEN BY \_\_\_\_\_ POS IN VEH \_\_\_\_\_

INJURED WITNESS \_\_\_\_\_ PASSENGER NAME LAST \_\_\_\_\_ FIRST \_\_\_\_\_ MIDDLE INITIAL \_\_\_\_\_ SEX \_\_\_\_\_ ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_ DOB NO./DAY/YR \_\_\_\_\_

UNIT \_\_\_\_\_ INJURY SEVERITY \_\_\_\_\_ TYPE OF INJURY \_\_\_\_\_ SAFETY EQUIPMENT IN USE \_\_\_\_\_ AIR BAG DEPLOYED? \_\_\_\_\_ EJECTED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ PINNED? \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_ INJURED TAKEN BY \_\_\_\_\_ POS IN VEH \_\_\_\_\_

DAMAGE TO PROPERTY \_\_\_\_\_ OTHER THAN VEHICLES \_\_\_\_\_

SCEN (OFFICER'S RANK & NAME) \_\_\_\_\_ (RANGE NUMBER) \_\_\_\_\_ TROOP OR DISTRICT \_\_\_\_\_ REVIEWER (INITIALS & BADGE) \_\_\_\_\_ DATE OF REPORT \_\_\_\_\_

HERE:

1. APPARENTLY NORMAL	6. SLEEPY	1. NO INJURY	1. HEAD	1. NOT IN USE	6. AIR BAG	1. NO	1. REFUSED
2. DRINKING - ABILITY IMPAIRED	7. SICK	2. POSSIBLE INJURY	2. TRUNK - EXTERNAL	2. SEAT BELT	7. SAFETY HELMET	2. OWNER	2. BREATH
3. ODOR OF ALCOHOLIC BEVERAGE	8. CONDITION NOT KNOWN	3. CONCUSSION	3. TRUNK - INTERNAL	3. SHOULDER BELT	8. UNKNOWING	3. OPERATOR	3. BLOOD
4. DRUG USE INDICATED	9. BODY DEFLECTS	4. INCAPACITATING	4. ARM	4. COMBINATION OF 2 & 3	9. OTHER	4. EXHAUST	4. BREATH/BLOOD
5. VERY WIND	10. OTHER	5. FATAL INJURY	5. LEG	5. CHILD RESTRAINT		5. OTHER	5. OTHER

SUPPLEMENTAL REPORT REQUIRED POSITION IN VEHICLE

1	2	3
4	5	6



COLLISION DIAGRAM

DIRECTION OF TRAVEL  
 UNIT A ☒ N ☐ S ☐ E ☐ W  
 UNIT ☐ N ☐ S ☐ E ☐ W  
 VISIBILITY OBSCURED BY

SEE PAGE 3 FOR DIAGRAM

## REMARKS

UNIT-A CONTINUED SOUTHBOUND FROM THE SCENE WITHOUT STOPPING. UNIT-A DRIVER DESCRIBED AS A WHITE/MALE WITH SANDY BLONDE HAIR.

TELEPHONE INSTALLED?	UNIT 1	UNIT 2	IN USE?	UNIT 1	UNIT 2	INVESTIGATION MADE AT SCENE?	Y	N	HIT AND RUN?	Y	N	PHOTOGRAPHS TAKEN?	Y	N	OVERSIZE VEHICLE	P	E
							X			X		X					

WHAT VEHICLE(S) WERE GOING TO DO		WHAT VEHICLE(S) DID		TRAFFIC CONTROL	
1 GO AHEAD	UNIT A <input checked="" type="checkbox"/> 8	1 WENT AHEAD	UNIT A <input checked="" type="checkbox"/> 9	1 STOP SIGN	UNIT A <input checked="" type="checkbox"/> 12
2 TURN LEFT		2 TURNED LEFT		2 TRAFFIC SIGNAL	
3 TURN RIGHT		3 TURNED RIGHT		3 FLASHING SIGNAL	
4 MAKE "U" TURN		4 SWERVED LEFT		4 YIELD SIGN	
5 STOP		5 SWERVED RIGHT		5 WARNING SIGN (TYPE IN REMARKS)	
6 SLOW FOR CAUSE		6 ENTERED "U" TURN		6 RAILROAD ADVANCE WARNING SIGN	
7 START FROM PARK	11 BACK	7 STOPPED		7 RAILROAD CROSSEINGS	11 OFFICER
8 CHANGE LANES	12 REMAIN STOPPED	8 STARTED FROM PARK		8 RAILROAD GATES	12 NO CONTROL
9 OVERTAKE	13 REMAIN PARKED	9 ENTERED OTHER LANE		9 RAILROAD SIGNAL	13 ABNORMAL CONTROL
10 PASS	14 OTHER	10 OVERTAKING	17 OTHER	10 NO PASSING ZONE	14 OTHER

TYPE OF ROAD		ROAD CHARACTER		OBJECT STRUCK BY VEHICLE OR LOAD ON FIRST CONTACT	
1 ONE-WAY ROAD	UNIT A <input checked="" type="checkbox"/> 5	1 STRAIGHT-LEVEL	UNIT A <input checked="" type="checkbox"/> 3	1 FENCE POLE	11 TRAFFIC CONTROL SIGN
2 ALLEY		2 STRAIGHT-UPGRADE		2 UTILITY POLE	12 SAND BARRELS
3 TWO LANES		3 STRAIGHT-DOWNGRADE		3 GUARD RAIL	13 ATTENUATORS
4 THREE LANES		4 STRAIGHT-HILLOREST		4 GUARD RAIL END	14 PAVEMENT DROP OFF
5 FOUR OR MORE (BARRIERS)		5 CURVE-LEVEL		5 CULVERT POST	15 DITCH
6 FOUR OR MORE (BARRIERS)		6 CURVE-UPGRADE		6 CULVERT	16 EMBANKMENT
7 DRIVEWAY		7 CURVE-DOWNGRADE		7 TRAFFIC SIGNAL	17 TREE
8 TURN BAY	11 CONSTRUCTION ZONE	8 CURVE-HILLOREST		8 BARRIER	18 DRAINAGE STRIP
9 ON RAMP	12 OTHER	9 OTHER		9 CURB	19 RETAINING WALL
10 OFF RAMP				10 ISLAND	20 FENCE

WEATHER		LIGHT		LOCALITY		ROAD SURFACE		ROAD CONDITION	
1 CLEAR	UNIT A <input checked="" type="checkbox"/> 3	1 DAYLIGHT	UNIT A <input checked="" type="checkbox"/> 1	1 RESIDENTIAL	UNIT A <input checked="" type="checkbox"/> 2	1 CONCRETE	UNIT A <input checked="" type="checkbox"/> 1	1 DRY	UNIT A <input checked="" type="checkbox"/> 1
2 FOG		2 DARKNESS		2 BUSINESS		2 ASPHALT		2 WET	
3 CLOUDS PRESENT		3 LIGHTED		3 INDUSTRIAL		3 GRAVEL		3 ICE	
4 RAINING		4 DAWN		4 SCHOOL		4 DIRT		4 SNOW	
5 SHOWING		5 DUSK		5 NOT BUILT UP		5 OTHER		5 MUDDY	
6 OTHER		6 OTHER		6 OTHER				6 OTHER	

POINT OF FIRST CONTACT ON VEHICLE		VEHICLE CONDITION		PEDESTRIAN ACTION	
TOP	UNIT A <input checked="" type="checkbox"/> 9	1 APPARENTLY NORMAL	UNIT A <input checked="" type="checkbox"/> 9	1 CROSSING AT INTERSECTION	UNIT A <input checked="" type="checkbox"/> 9
BOTTOM		2 BRAKES		2 CROSSING, NOT AT INTERSECTION	
		3 HEADLIGHTS		3 CROSSING/AT OTHER CROSSWALK	
		4 STEERING		4 GETTING ON VEHICLE	
		5 TAIL LIGHTS		5 GETTING OFF VEHICLE	
		6 BRAKE LIGHTS		6 WALKING WITH TRAFFIC	
		7 TIRES/WHEELS		7 WALKING AGAINST TRAFFIC	10 PLAYING
		8 SUSPENSION		8 PUSH ON VEHICLE	11 OTHER WORK
		9 OTHER		9 WORK ON VEHICLE	12 OTHER

UNSAFE, UNLAWFUL, OR OTHER ACTION (THIS SECTION PRIMARILY FOR GENERAL STATISTICAL AND ADMINISTRATIVE PURPOSES)		BLOCKS 1 THRU 10 MUST BE DESCRIBED WHEN CHECKED	
UNIT A	UNIT 2	PLK	REMARKS
1 FAILED TO YIELD/STOP	6 UNSAFE VEHICLE	5	CHANGED LANES UNSAFELY
2 FOLLOWED TOO CLOSELY	7 LEFT OF CENTER/PASSING		
3 UNSAFE SPEED	8 NOT KNOWN/NO APPROPRIATE ACTION		
4 MADE IMPROPER TURN	9 PEDESTRIAN/BICYCLE ACTION		
X 5 CHANGE LANES UNSAFELY	10 OTHER (DESCRIBE)		

DO NOT WRITE IN THIS SPACE

## OFFICIAL

## TRAFFIC COLLISION REPORT - SUPPLEMENT -

COMMERCIAL	CONTINUATION	X	REPORTING AGENCY:	ACCIDENT NO	ADMINISTRATIVE
MONTH	DAY	YEAR	24 HOUR TIME	COUNTY	COUNTY NUMBER

## COMMERCIAL VEHICLE - HAZARDOUS MATERIAL PLACARD

COMMERCIAL INFORMATION	UNIT NUMBER	UG DOT CENSUS NUMBER	ICC NUMBER	OCC NUMBER	QUALIFIED DRIVER?	Y	N	TOWED?	Y	N
CARRIER NAME	SOURCE VEHICLE				PAPERS	DRIVER				
CARRIER ADDRESS	STREET/RTD				CITY	STATE	ZIP			
DRIVER NAME	LAST				FIRST	MIDDLE				

VEHICLE INFORMATION	OWNER/OWNER	TOTAL NO AXLES	HAZ MAT PLACARD?	Y	N	MATERIAL IDENTIFICATION NUMBER	HAZARD CLASS	HAZARDOUS MATERIAL SPILL?	Y	N	VEHICLE CONFIGURATION	CARGO BODY TYPE	FEDERALLY REPORTABLE?	Y	N
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COMMERCIAL INFORMATION	UNIT NUMBER	UG DOT CENSUS NUMBER	ICC NUMBER	OCC NUMBER	QUALIFIED DRIVER?	Y	N	TOWED?	Y	N
CARRIER NAME	SOURCE VEHICLE				PAPERS	DRIVER				
CARRIER ADDRESS	STREET/RTD				CITY	STATE	ZIP			
DRIVER NAME	LAST				FIRST	MIDDLE				

VEHICLE INFORMATION	OWNER/OWNER	TOTAL NO AXLES	HAZ MAT PLACARD?	Y	N	MATERIAL IDENTIFICATION NUMBER	HAZARD CLASS	HAZARDOUS MATERIAL SPILL?	Y	N	VEHICLE CONFIGURATION	CARGO BODY TYPE	FEDERALLY REPORTABLE?	Y	N
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## INJURED/WITNESS CONTINUATION

INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH
INJURED	WITNESS	PASSENGER	NAME LAST	FIRST	MIDDLE INITIAL	SEX	ADDRESS	PHONE	DOB MO/DAY/YR							
UNIT	INJURY SEVERITY	TYPE OF INJURY	SAFETY EQUIPMENT IN USE	Y	N	AIR BAG DEPLOYED?	Y	N	EJECTED?	Y	N	PINNED?	Y	N	INJURED TAKEN BY	POS IN VEH

SIGN (OFFICER'S RANK & NAME)	(BADGE NUMBER)	TROOP OR DIVISION	INVESTIGATOR'S INITIALS & BADGE	DATE OF REPORT
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VEHICLE CONFIGURATION	CARGO BODY TYPE	INJURY SEVERITY	TYPE OF INJURY	EQUIPMENT IN USE	POSITION IN VEHICLE
1 BUS 2 SINGLE TRUCK - 2 AXLES 3 SINGLE TRUCK - 3 OR MORE AXLES 4 TRUCK AND TRAILER 5 TRUCK TRACTOR - BORTAK	6 TRACTOR/SEMI - TRAILER 7 TRACTOR/DOUBLES 8 TRACTOR/TRIPLES 9 UNKNOWN - HEAVY TRUCK	1 NO INJURY 2 POSSIBLE INJURY 3 NON-INCAPACITATING 4 INCAPACITATING 5 FATAL INJURY	1 HEAD 2 TRUNK-EXTERNAL 3 TRUNK-INTERNAL 4 ARM 5 LEG	1 NOT IN USE 2 SEAT BELT 3 SHOULDER BELT 4 COMBINATION OF 2 & 3 5 CHILD RESTRAINT	FRONT 1 2 3 4 5 6

PLEASE TYPE OR PRINT LEGIBLY



BEST AVAILABLE

ADDITIONAL REMARKS/COLLISION DIAGRAM

①

DIRECTION OF TRAVEL

	N	S	E	W
UNIT 1		X		
UNIT 2	X			

DIAGRAM TO SCALE

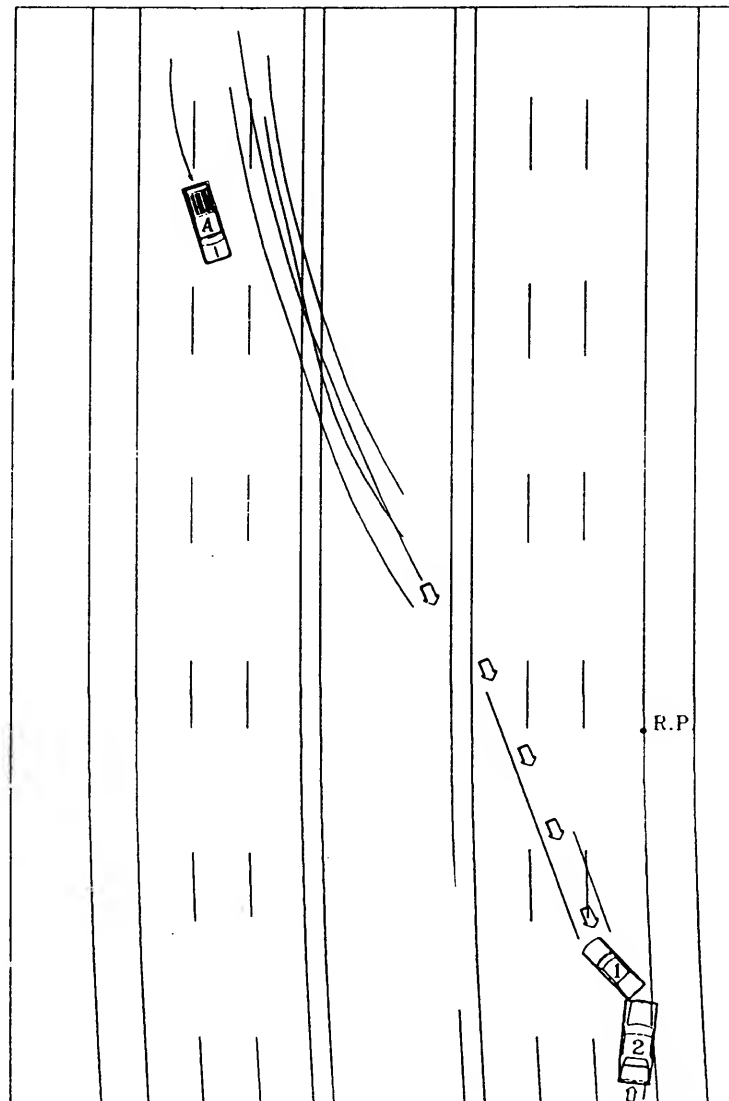
Y N  
X

SCALE-

1:40

VISIBILITY  
OBSERVED BY

NONE



POINT OF IMPACT:  
57 FEET SOUTH OF REFERENCE POINT  
4 FEET WEST OF EAST EDGE OF

TIREMARKS:  
UNIT-1 HAD 180 FEET OF SCUFFS BEFORE IMPACT  
UNIT-2 HAD 18 FEET OF SKIDS BEFORE IMPACT

## CRIME REPORT

Reported Date: Time: Case: Page: 1  
Code: Crime: INJ H/R ACC Class:  
Occurrence Date: Day: Time:  
Status: Closing Officer:  
Location: RD:

===== NARRATIVE =====  
DATE/TIME:

LOCATION:

DRIVER #1:

DRIVER #2:

PASSENGER UNIT #1:

VICTIM #1: 8 MONTHS OLD.

VICTIM #2: 8 MONTHS OLD.

NEXT OF KIN (VICTIM #1):

(VICTIM #2):

NOTIFIED (VICTIM #1):

(VICTIM #2):

MEDICAL EXAMINER:

CAUSE OF DEATH:

TIME PRONOUNCED (VICTIM #1):

===== Standard Trailer - First Page =====

Reporting Officer: Number: Date: Time:  
Typed by: Number: Date: Time:  
Approving Officer: Number: Date: Time:



CASE NUMBER IN 9623

# MISSING DATA

**THE FOLLOWING DATA ARE NOT INCLUDED IN THIS CASE:**

**PAGE NUMBER(S)**

2

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Standard Continuation Page

=====

Reported Date:                      Time:                      Case:                      Page: 3  
 Code:                      Crime: INJ H/R ACC                      Class:

TEMPERATURE:                      78 DEGREES  
 HUMIDITY:                      32%  
 PRESSURE:                      30.10 AND FALLING

TRAFFIC CONTROL: THE ONLY TRAFFIC CONTROL IN THE AREA OF THE COLLISION WAS THE POSTED 60 MPH SPEED LIMIT FOR BOTH NORTH AND SOUTHBOUND TRAFFIC.

VISIBILITY: VISIBILITY AT THE SCENE WAS CLEAR FOR BOTH DRIVERS AND DID NOT CONTRIBUTE TO THIS COLLISION.

ROAD CONDITIONS: THE ROADWAY AT THE SCENE IS A SIX LANE HIGHWAY DIVIDED BY A GRASS MEDIAN. THE ROADWAY IS OF CONCRETE CONSTRUCTION AND WAS DRY, CLEAR AND FREE OF DEFECTS WHICH COULD HAVE CONTRIBUTED TO THIS COLLISION.

WITNESS STATEMENTS: STATEMENT OF

ON                      I WAS ENROUTE TO                      TO MAKE A PAYMENT. I  
 LEFT MY RESIDENCE EAST ON NORTHWEST                      AND PROCEEDED  
 SOUTH. AT NORTHWEST HIGHWAY I OBSERVED A DARK GMC JIMMY GET ON  
 HE WAS IN THE LEFT LANE AND I WAS IN THE RIGHT LANE AT THE LIGHT.  
 WE BOTH TURNED RIGHT. HE PASSED ME ON THE LEFT AND MADE SEVERAL LANE  
 CHANGES UP TO THE TIME OF THE ACCIDENT. THE JIMMY WAS IN THE RIGHT LANE  
 AND MADE A QUICK LANE CHANGE IN FRONT OF THE VEHICLE INVOLVED IN THE  
 ACCIDENT. THE JIMMY DID NOT SIGNAL FROM MY OBSERVATION AND BASICALLY CUT  
 HER OFF. SHE CAME OVER INTO MY LANE AND I SAW HER GO INTO THE CENTER  
 MEDIAN, WENT AIRBORNE AND SPUN IN THE AIR. I PULLED OVER IN THE CENTER  
 MEDIAN AND STOPPED. I HAD A HARD TIME GETTING TO THEM BECAUSE OF THE  
 TRAFFIC. I WAS TRAVELLING ABOUT 55-60 MPH AND MAY HAVE BEEN GAINING ON  
 THEM SOME. I WAS IN THE LEFT LANE ABOUT THREE CAR LENGTHS BACK WHEN SHE  
 CAME OVER IN MY LANE. BOTH OCCUPANTS HAD THEIR SEATBELTS ON. THE JIMMY  
 LOOKED LIKE THERE WAS ONLY 5 FEET BETWEEN THEM AND THE JIMMY. IT DID NOT  
 LOOK LIKE THERE WAS ENOUGH ROOM FOR HIM TO COME OVER WITHOUT HITTING THEM.

WRITTEN STATEMENT OF

I WAS TRAVELLING NORTHBOUND ON                      GOING APPROXIMATELY 65 MPH.  
 I GLANCED OVER TO SOUTHBOUND SIDE AND SAW A DARK BLUE OR BLACK JIMMY OR  
 BRONCO SUBURBAN PASS AND ALMOST CLIP A GREEN CAR CAUSING THE GREEN VEHICLE  
 TO LOSE CONTROL AND CROSS MEDIAN. IT APPEARED TO GO AIRBORNE AND STRUCK A  
 BROWN CADILLAC TRAVELLING NORTHBOUND BEHIND ME. THE CARS COLLIDED AND IT  
 APPEARED THAT THE GREEN CAR DISINTEGRATED ON IMPACT.

TELEPHONE STATEMENT OF

=====

Standard Trailer - Continuation

=====

Reporting Officer:                      Number:                      Date:                      Time:  
 Typed by:                      Number:                      Date:                      Time:  
 Approving Officer:                      Number:                      Date:                      Time:



CASE NUMBER IN9623

# MISSING DATA

THE FOLLOWING DATA ARE NOT INCLUDED IN THIS CASE:

PAGE NUMBER(S)

4

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COLE.

WAS NOTIFIED OF THE COLLISIONS AND HE SAID THAT HE TAKE CUSTODY OF THE BODIES.

FROM THE INVESTIGATION OF THIS COLLISION WE WERE ABLE TO DETERMINE THE FOLLOWING SEQUENCE OF EVENTS: ON

WITNESS ... OBSERVED A DARK COLORED GMC JIMMY TO GET ON SOUTHBOUND FROM ... AND AS THE VEHICLE DID IT MADE SEVERAL QUICK LANE CHANGES. THE JIMMY THEN MADE A SUDDEN LANE CHANGE IN THE 4000 BLOCK OF ... FROM THE RIGHT LANE TO THE CENTER LANE CAUSING THE DRIVER OF THE GREEN MAZDA TO SWERVE LEFT AND APPLY THE BRAKES. THE DRIVER OF THE MAZDA THEN LOST CONTROL AND WENT INTO A LEFT YAW ROTATING COUNTER-CLOCKWISE ACROSS THE MEDIAN AND INTO THE NORTHBOUND LANES AT WHICH TIME THE REAR LEFT OF THE MAZDA COLLIDED WITH THE FRONT LEFT OF THE CADILLAC WHICH WAS NORTHBOUND IN THE RIGHT LANE.

**ACCIDENT COLLISION MEASUREMENT TABLE**



## ACCIDENT COLLISION MEASUREMENT TABLE

BEST AVAILABLE

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

Primary Sampling Unit Number 10

Case Number—Stratum 96 2 3

### ACCIDENT COLLISION DIAGRAM

Document the physical plant:

- all road/roadway delineation (e.g., curbs/edge lines, line markings, median markings, pavement markings, parked vehicles, poles, signs, etc.)
- all traffic controls (e.g., signs/signals, etc.)
- north arrow placed on diagram
- roadway surface type and condition of applicable roadways
- grade measurements for all applicable roadways and at location of rollover initiation
- roadway curvature (include measurement of precrash superelevation for each vehicle if applicable)

Document vehicle dynamics including:

- reference point and reference line relative to physical features present at the scene
- scaled documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

## CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle		354	
Surface Type	CON	CON	
Surface Condition			
Coefficient of Friction			
Grade (v/h) Measurement (before impact and final rest)	4.8		
Grade (v/h) Measurement (at location of rollover initiation)			
Grade (v/h) Measurement (at pre-crash location)	4.5		

**Reference Point:** \_\_\_\_\_

Reference line: \_\_\_\_\_

[illegible]

[illegible]

**NASS CDS ACCIDENT FORM**





## ACCIDENT FORM

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9623

### IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted 02

4. Date of Accident  
(Month,Day,Year) 196

5. Time of Accident 1542

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

### SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. 0 SS15 Administrative Use

7. 0 SS16 Pedestrian Crash Data Study  
(Data for this special study available  
in a separate file.)

8. 0 SS17 Impact Fires

9. 0 SS18 Unsafe Driver Actions

10. 0 SS19 Run Off Road

### NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident 01

Code the number of events which occurred  
in this accident.

### ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>01</u>	13. <u>01</u>	14. <u>01</u>	15. <u>B</u>	16. <u>02</u>	17. <u>04</u>	18. <u>F</u>
19. <u>02</u>	20. <u>  </u>	21. <u>  </u>	22. <u>  </u>	23. <u>  </u>	24. <u>  </u>	25. <u>  </u>
26. <u>03</u>	27. <u>  </u>	28. <u>  </u>	29. <u>  </u>	30. <u>  </u>	31. <u>  </u>	32. <u>  </u>
33. <u>04</u>	34. <u>  </u>	35. <u>  </u>	36. <u>  </u>	37. <u>  </u>	38. <u>  </u>	39. <u>  </u>
40. <u>05</u>	41. <u>  </u>	42. <u>  </u>	43. <u>  </u>	44. <u>  </u>	45. <u>  </u>	46. <u>  </u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle *CV: 96.3 ⇒ 247*
- (01) Subcompact/mini (wheelbase < 254 cm) ←
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm) ←
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (14) Compact utility vehicle *VZ: 112.8 ⇒ 289*
- (15) Large utility vehicle (≤ 4,536 kgs GVWR)
- (16) Utility station wagon (≤ 4,536 kgs GVWR)
- (19) Unknown utility type
- (20) Minivan (≤ 4,536 kgs GVWR)
- (21) Large van (≤ 4,536 kgs GVWR)
- (24) Van Based school bus (≤ 4,536 kgs GVWR)
- (28) Other van type (≤ 4,536 kgs GVWR)
- (29) Unknown van type (≤ 4,536 kgs GVWR)
- (30) Compact pickup truck (≤ 4,536 kgs GVWR)
- (31) Large pickup truck (≤ 4,536 kgs GVWR)
- (38) Other pickup truck (≤ 4,536 kgs GVWR)
- (39) Unknown pickup truck type (≤ 4,536 kgs GVWR)
- (45) Other light truck (≤ 4,536 kgs GVWR)
- (48) Unknown light truck type (≤ 4,536 kgs GVWR)
- (49) Unknown light vehicle type
- (50) School bus (excludes van based) (> 4,536 kgs GVWR)
- (58) Other bus (> 4,536 kgs GVWR)
- (59) Unknown bus type
- (60) Truck (> 4,536 kgs GVWR)
- (67) Tractor without trailer
- (68) Tractor-trailer(s)
- (78) Unknown medium/heavy truck type
- (79) Unknown light/medium/heavy truck type
- (80) Motored cycle
- (90) Other vehicle
- (99) Unknown

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

- |   |                         |                |                   |
|---|-------------------------|----------------|-------------------|
| CDS APPLICABLE<br>AND OTHER<br>VEHICLES | (O) Not a motor vehicle | (R) Right side | (T) Top           |
|   | (N) Noncollision        | (L) Left side  | (U) Undercarriage |
|   | (F) Front               | (B) Back       | (9) Unknown       |
- 
- |                               |                         |   |                         |
|-------------------------------|-------------------------|---|-------------------------|
| TDC<br>APPLICABLE<br>VEHICLES | (O) Not a motor vehicle | (L) Left side   | (C) Rear of cab         |
|                               | (N) Noncollision        | (B) Back of unit with cargo area<br>(rear of trailer or straight truck) | (V) Front of cargo area |
|                               | (F) Front               | (D) Back (rear of tractor)  | (T) Top                 |
|                               | (R) Right side          |   | (U) Undercarriage       |
|                               |                         |   | (9) Unknown             |

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

- (01-30) — Vehicle Number
- Noncollision
- (31) Overturn — rollover (excludes end-over-end)
- (32) Rollover — end-over-end
- (33) Fire or explosion
- (34) Jackknife
- (35) Other intraunit damage (specify): \_\_\_\_\_
- (36) Noncollision injury
- (38) Other noncollision (specify): \_\_\_\_\_
- (39) Noncollision — details unknown
- Collision With Fixed Object
- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)
- Nonbreakaway Pole or Post
- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_
- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_
- (69) Unknown fixed object
- Collision with Nonfixed Object
- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): \_\_\_\_\_
- (89) Unknown nonfixed object
- (98) Other event (specify): \_\_\_\_\_
- (99) Unknown event or object

**NASS CDS VEHICLE FORMS: CASE VEHICLE**





## GENERAL VEHICLE FORM

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

### VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

MAZDA  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

MX-3  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

JM1EC4319P  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

### OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

\_\_\_\_ mph X 1.6093 = \_\_\_\_ kmph

12. Speed Limit

(000) No statutory limit  
Code posted or statutory speed limit in kmph  
(999) Unknown

60 mph X 1.6093 = 097 kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver

Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

15. Police Reported Other Drug Presence For Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):  
(8) No driver present  
(9) Unknown

# CODES FOR BODY TYPE

BEST AVAILABLE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,536$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,536$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,536$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,536$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,536$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,536$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,536$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,536$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,536$ kgs GVWR)

- (60) Step van ( $> 4,536$  kgs GVWR)
- (61) Single unit straight truck ( $4,536 \text{ kgs} < \text{GVWR} \leq 8,845 \text{ kgs}$ )
- (62) Single unit straight truck ( $8,845 \text{ kgs} < \text{GVWR} \leq 11,793 \text{ kgs}$ )
- (63) Single unit straight truck ( $> 11,793 \text{ kgs GVWR}$ )
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 0  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related  
*Non-Interchange junctions*  
 (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_  
 (5) Unknown type of junction  
 (9) Unknown
20. Trafficway Flow 1  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown
21. Number Of Travel Lanes 4  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown
22. Roadway Alignment 1  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown
23. Roadway Profile 4  
 (1) Level  
 (2) Uphill grade (>2%)  
 (3) Hill crest  
 (4) Downhill grade (>2%)  
 (5) Sag  
 (9) Unknown
24. Roadway Surface Type 1  
 (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
25. Roadway Surface Condition 1  
 (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown
26. Light Conditions 1  
 (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown
27. Atmospheric Conditions 0  
 (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown
28. Traffic Control Device 5  
 (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)  
*Regulatory*  
 (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): SPEED Limit  
 (6) Warning sign (not RR crossing)  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_  
 (9) Unknown
29. Traffic Control Device Functioning 2  
 (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown



**PRECRASH DRIVER RELATED DATA**

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 04
- (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see
- Distractions*  
 (03) By other occupant(s), (specify): \_\_\_\_\_  
 (04) By moving object in vehicle (specify): \_\_\_\_\_  
 (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_  
 (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_  
 (07) While adjusting climate controls  
 (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_  
 (09) While using other device/controls integral to vehicle (specify): \_\_\_\_\_  
 (10) While using or reaching for device/object brought into vehicle (specify): \_\_\_\_\_  
 (11) Sleepy or fell asleep  
 (12) Distracted by outside person, object, or event (specify): \_\_\_\_\_  
 (13) Eating or drinking  
 (14) Smoking related  
 (97) Distracted/inattentive, details unknown  
 (98) Other, distraction (specify): \_\_\_\_\_  
 (99) Unknown
31. Pre-Event Movement (Prior to Recognition of Critical Event) 01
- (00) No driver present  
 (01) Going straight  
 (02) Decelerating in traffic lane  
 (03) Accelerating in traffic lane  
 (04) Starting in traffic lane  
 (05) Stopped in traffic lane  
 (06) Passing or overtaking another vehicle  
 (07) Disabled or parked in travel lane  
 (08) Leaving a parking position  
 (09) Entering a parking position  
 (10) Turning right  
 (11) Turning left  
 (12) Making a U-turn  
 (13) Backing up (other than for parking position)  
 (14) Negotiating a curve  
 (15) Changing lanes  
 (16) Merging  
 (17) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify): \_\_\_\_\_  
 (99) Unknown
32. Critical Precrash Event 61
- THIS VEHICLE LOSS OF CONTROL DUE TO:**
- (01) Blow out or flat tire  
 (02) Stalled engine  
 (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_  
 (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_  
 (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_  
 (06) Traveling too fast for conditions  
 (08) Other cause of control loss (specify): \_\_\_\_\_  
 (09) Unknown cause of control loss

**THIS VEHICLE TRAVELLING**

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

**OTHER MOTOR VEHICLE IN LANE**

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor vehicle in lane

**OTHER MOTOR VEHICLE ENCROACHING INTO LANE**

- (60) From adjacent lane (same direction)—over left lane line  
 (61) From adjacent lane (same direction)—over right lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details unknown

**PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST**

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway—(specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

**OBJECT OR ANIMAL**

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown

33. Attempted Avoidance Maneuver 08

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 4

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 4

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

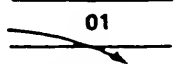

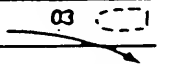
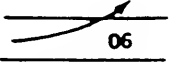
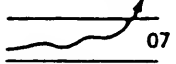
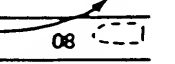
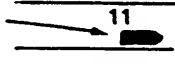


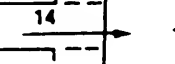
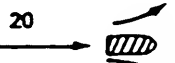
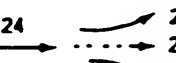
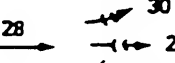

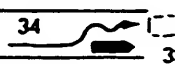
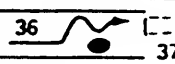
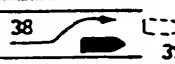
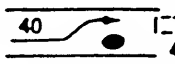
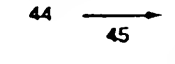




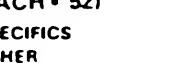
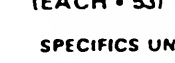





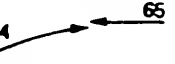
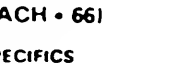


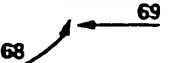



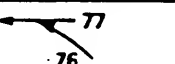

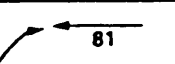

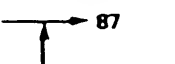



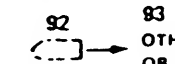

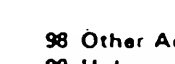

36. Accident Type 66

(Note: Applicable codes on back of this page)

- (00) No impact  
Code the number of the diagram that best describes the accident circumstance
- (98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 26, 27	 24 DECEL. 28, 30, 31	 26 AVOID COLLISION WITH VEH.	(EACH • 32) SPECIFICS OTHER (EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 LATERAL MOVE	 46 LATERAL MOVE	 48 LATERAL MOVE	 49 LATERAL MOVE	(EACH • 48) SPECIFICS OTHER (EACH • 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	 51 LATERAL MOVE	 52 LATERAL MOVE	 53 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER (EACH • 53) SPECIFICS UNKNOWN
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER (EACH • 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	 65 LATERAL MOVE	 66 LATERAL MOVE	 67 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER (EACH • 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 INITIAL SAME DIRECTIONS	 74 INITIAL SAME DIRECTIONS	(EACH • 74) (EACH • 75) SPECIFICS OTHER SPECIFICS UNKNOWN
	K Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO SAME DIRECTION	 80 TURN INTO OPPOSITE DIRECTIONS	 82 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) (EACH • 85) SPECIFICS OTHER SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damaged)	L Straight Paths	 86 STRAIGHT PATHS	 88 STRAIGHT PATHS	 90 STRAIGHT PATHS	 91 STRAIGHT PATHS	(EACH • 90) SPECIFICS OTHER (EACH • 91) SPECIFICS UNKNOWN
VI Miscellaneous	M Backing Etc	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	 98 OTHER ACCIDENT TYPE	 99 UNKNOWN ACCIDENT TYPE	98 Other Accident Type 99 Unknown Accident Type 00 No Impact



**OCCUPANT RELATED**

37. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
38. Number of Occupants This Vehicle 02  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
39. Number of Occupant Forms Submitted 02

**AIR BAG RELATED**

40. Is this an AOPS Vehicle? 1  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 0  
 (0) Not equipped or not available  
 (1) No air bags deployed  
*Single Air Bag Vehicle*  
 (2) Driver air bag deployed  
 (3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
 (4) Driver side only deployed  
 (5) Passenger side only deployed  
 (6) Driver and passenger side deployed  
 (7) Driver and passenger side unknown if deployed  
 (8) Air bag(s) deployed, details unknown  
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
 (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

**VEHICLE WEIGHT ITEMS**

43. Vehicle Curb Weight 1.090  
2396 Code weight to nearest 10 kilograms.  
 (045) Less than 454 kilograms  
 (612) 6,124 kilograms or more  
 (999) Unknown  
2,396 lbs X .4536 = 1,086.8 kgs  
 Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0.000  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (454) 4,536 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: \_\_\_\_\_

**ROLLOVER DATA**

45. Rollover 00  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
 (00) No rollover  
 (01) Trip-over  
 (02) Flip-over  
 (03) Turn-over  
 (04) Climb-over  
 (05) Fall-over  
 (06) Bounce-over  
 (07) Collision with another vehicle  
 (08) Other rollover initiation type specify): \_\_\_\_\_  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder--paved  
 (3) On shoulder--unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
48. Rollover Initiation Object Contacted 00  
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
 (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (6) Non-contact rollover forces (specify): \_\_\_\_\_  
 (8) Rollover--end-over-end  
 (9) Unknown
50. Direction of Initial Roll 0  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 1
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (1) 1st CDC
- (2) 2nd CDC
- (3) Other not automated CDC (specify):
- \_\_\_\_\_

*Underride (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (4) 1st CDC
- (5) 2nd CDC
- (6) Other not automated CDC (specify):
- \_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)
- (9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value

- (996) Non-horizontal impact
- (997) Noncollision
- (998) Impact with object
- (999) Unknown

53. Heading Angle For This Vehicle 310
54. Heading Angle For Other Vehicle 000

**RECONSTRUCTION DATA**

55. Towed Trailing Unit 0
- (0) No towed unit
- (1) Yes—towed trailing unit
- (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No
- (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
- (1) Not damaged
- (2) Cracked/sheared
- (3) Tilted <45 degrees
- (4) Tilted ≥45 degrees
- (5) Uprooted tree
- (6) Separated pole from base
- (7) Pole replaced
- (8) Other (specify):
- \_\_\_\_\_
- (9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**

58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program-damage only routine
- (02) Reconstruction program-damage and trajectory routine
- (03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover
- (06) Other non-horizontal forces
- (07) Sideswipe type damage
- (08) Severe override
- (09) Yielding object
- (10) Overlapping damage
- (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):
- \_\_\_\_\_
- \_\_\_\_\_

- (98) Other, (specify): \_\_\_\_\_
- \_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

52

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

60. Longitudinal Component of Delta V

Highest

⊕  
=04040

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means greater than  
 -0.5 kmph and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (999) Unknown

61. Lateral Component of Delta V

Highest

⊕  
=03333

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means greater than -0.5 kmph and  
 less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (999) Unknown

62. Energy Absorption

Highest

204.8 00204760

Nearest 100 joules (highest)

Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
 (9997) 999,650 joules or more  
 (9999) Unknown

63. Impact Speed

Highest

998

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (998) Trajectory algorithm not run  
 (999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

- (0) No reconstruction  
 (1) Collision fits model — results appear reasonable  
 (2) Collision fits model — results appear high  
 (3) Collision fits model — results appear low  
 (4) Borderline reconstruction — results appear reasonable

1

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

50.9

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown



**ESTIMATED DELTA V**

66. Estimated Highest Delta V (Researcher Determined)

(0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph  
 (2)  $\geq$  10 kmph but < 25 kmph  
 (3)  $\geq$  25 kmph but < 40 kmph  
 (4)  $\geq$  40 kmph but < 55 kmph  
 (5)  $\geq$  55 kmph

*Other estimates of damage severity*

- (6) Minor  
 (7) Moderate  
 (8) Severe  
 (9) Unknown

**INSPECTION TYPE**

67. Type of Vehicle Inspection

- (0) No inspection  
 (1) Vehicle fully repaired-no damage evident  
 (2) Partial inspection (specify):  
 (3) Complete inspection

**DELTA V EVENT NUMBER**

68. Delta V Event Number

- Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle  
 (99) Unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
 OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

Administration		CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>9623</u>		

### VEHICLE IDENTIFICATION

VIN JM1EC4319P0 \_\_\_\_\_ Model Year 93  
Vehicle Make (specify): MAZDA Vehicle Model (specify): MX3 Coupe

## LOCATOR

**Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.**

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	④ BC OVER 115CM	ACROSS REAR Bumper	

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

Curb Weight

for 5-speed manual  $2,332$   $2,332$   
64

	1994	1992
Branham's Shipping Weight		
for 5-speed manual	2,443	2,332
for 4-speed automatic	2,507	

$$\begin{array}{r} 2,507 \\ - 2,443 \\ \hline \end{array}$$

64 for automatic

## SPECIAL CRASH INVESTIGATION ADDENDUM

**Submodel Designation:** {specify} **Color:** {specify} B/y2 **Repair Cost:** \$ Total

**Transmission:** (circle) Automatic Manual **Speed:** 3-speed (circle) 4-speed 5-speed Other:

Steering: {circle} Power-assisted Manual Type: rack-and-pinion worm-and-gear | Other  
{please describe}:

**Brakes:** {circle} Power-assisted | Manual      **Type:** 4-wheel disc | 4-wheel drum | 4-wheel hydraulic  
| front disc, rear drum | Other:

**Observed Defects:** {specify}

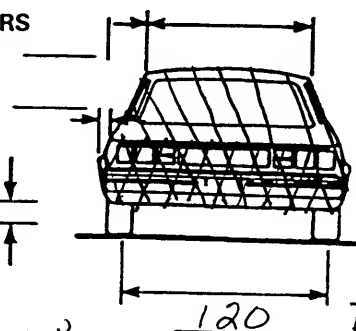
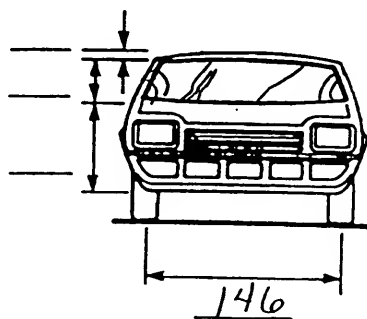
**Fleet Type:** {circle} **Private vehicle** | Rental vehicle | Leased vehicle | Commercial vehicle | Other  
(please describe):



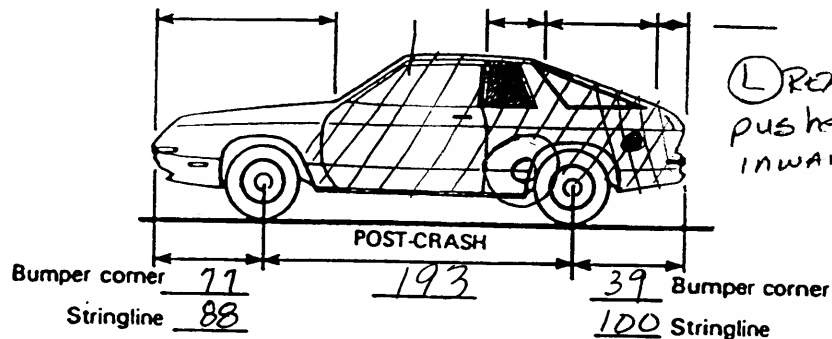
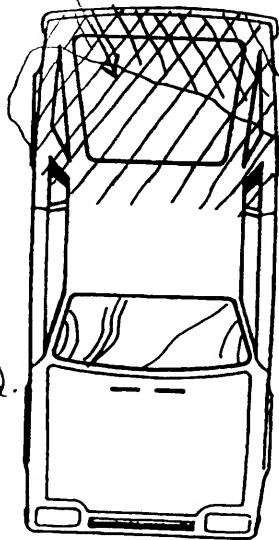
## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>1</u> LR <u>1</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>245</u> cm Overall Length <u>421</u> cm Maximum Width <u>169</u> cm Curb Weight <u>1,087</u> kg Average Track <u>146</u> cm Front Overhang <u>93</u> cm Rear Overhang <u>84</u> cm Undeformed End Width <u>152</u> cm Engine Size: cyl./displ. <u>1.6 I-4</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axes only) RF ± _____ ° LF ± _____ ° RR ± _____ ° LR ± _____ ° Within ± 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input type="checkbox"/> Yes <input type="checkbox"/> No				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight _____ kg			

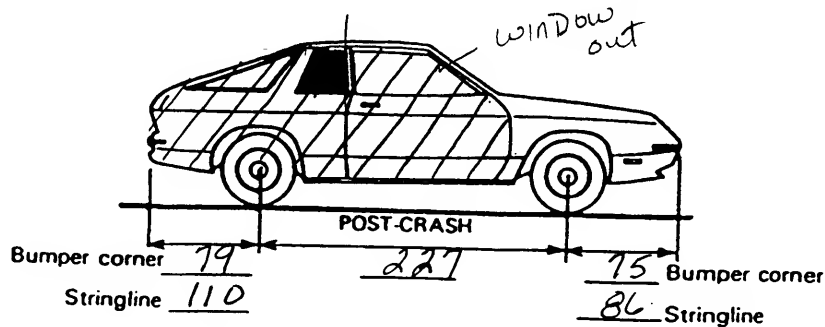
## MEASUREMENTS IN CENTIMETERS



Backlight out



Ⓛ REAR wheel pushed inward



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.  
Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

Type of Body Pass. Cap.	Model	Wheel Base	Total Length	Shp. Wt.	Tax H.P.	P.O.E. West Coast	P.O.E. East Coast
Auto. Trans. 4-speed; w/Intelligence and w/CA. Emissions; EPA Mileage Estimate 18/23							
5-PS 4-door Luxury Sedan	9110	110.8"	196.7"	3759	37.87	46,600	46,600
Options Lexus LS400: (DC)Remote 6-CD Compact Disc Auto-Changer-\$900; (FT)All-Season Tires-N/C; (MO)Memory System-\$800; (NK)Lexus/Nakamichi Premium Sound System(requires DC)-\$1000; (SA)Electronic Air Suspension W/Lexus Ride Control (requires MO & SR)-\$1500; (SR)Power Tilt and Slide Moonroof with Sunshade-\$1000; (TN)Traction control System(TRAC) with Heated Front Seats(requires FT)-\$1700							
Options Port Installed (All Models): (CF)Carpeted Floor Mats (placed in trunk of vehicle)-\$115; (LM)Carpeted Trunk Mat (without CD)(Placed in Trunk of Vehicle)-\$68; (ML)Carpeted Trunk Mat (with CD)(placed in Trunk of Vehicle)-\$68; (WL)WheelLocks(Installed)-\$50							

#### 1992 MAZDA 323 4 cyl 1.6 liter, B6E Gas engine(16 valve)

Bore & Stroke 3.07"x3.29"; Tax H.P. 15.08; SAE H.P. 82@5000; Torque 92@2500; P.D. 97.5 cu.in., 1.6 liter

Man. Trans. 5-speed; EPA Mileage Estimate 29/37

4-PS 3-door Hatchback	323	96.5"	163.6"	2238	15.08	7,199	7,199
4-PS 3-door Hatchback	323SE	96.5"	163.6"	2238	15.08	8,699	8,699

Auto. Trans. 4-speed; EPA Mileage Estimate 26/33

#### 1992 MAZDA PORTEGE DX 4 cyl 1.8 liter, BPE Gas Engine(16 valve)

Bore & Stroke 3.27"x3.35"; Tax H.P. 17.11; SAE H.P. 103@5500; Torque 111@4000; P.D. 112.5 cu.in., 1.8 liter

Man. Trans. 5-speed; EPA Mileage Estimate 28/36

5-PS 4-door Sedan	DX	98.4"	171.5"	2388	17.11	10,249	10249
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Auto. Trans. 4-speed; EPA Mileage Estimate 24/31

#### 1992 MAZDA PORTEGE LX 4 cyl 1.8 liter, BPD Gas Engine(16 valve)

Bore & Stroke 3.27"x3.35"; Tax H.P. 17.11; SAE H.P. 125@6500; Torque 114@4500; P.D. 112.5 cu.in., 1.8 liter

Man. Trans. 5-speed; EPA Mileage Estimate 25/30

5-PS 4-door Sedan	LX	98.4"	171.5"	2487	17.11	11,999	11,999
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Auto. Trans. 4-speed; EPA Mileage Estimate 24/29

#### 1992 MAZDA 929 V6 cyl 3.0 liter, DOHC Gas Engine(24 valve)

Bore & Stroke 3.5"x3.0"; Tax H.P. 29.4; SAE H.P. 195@5750; Torque 200@3500; P.D. 180.3 cu.in., 3.0 liter

Auto. Trans. 4-speed; EPA Mileage Estimate 19/24

6-PS 4-door Luxury Sedan	929	112.2"	193.7"	3596	29.4	28,500	28,500
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#### 1992 MAZDA MX3 4 cyl 1.6 liter B6E Gas Engine(16 valve)

Bore & Stroke 3.07"x3.29"; Tax H.P. 15.08; SAE H.P. 88@5000; Torque 98@4000; P.D. 98 cu.in., 1.6 liter

Man. Trans. 5-speed; EPA Mileage Estimate 29/35

4-PS 3-door Hatchback	MX3	96.3"	165.7"	2332	15.08	11,000	11,000
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Auto. Trans. 4-speed; EPA Mileage Estimate 25/32

#### 1992 MAZDA MX-3 GS V6 cyl 1.8 liter K8D Gas Engine(24 valve)

Bore & Stroke 2.95"x2.74"; Tax H.P. 20.89; SAE H.P. 130@4500; Torque 115@4500; P.D. 113 cu.in., 1.8 liter

Man. Trans. 5-speed; EPA Mileage Estimate 23/28

4-PS 3-door Hatchback	GS	96.3"	165.7"	2541	20.89	13,800	13,800
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Auto. Trans. 4-speed; EPA Mileage Estimate 20/27

#### 1992 MAZDA MX-5 MIATA 4 cyl 1.6 liter, DOHC B6-ZE Gas Engine(16 valve)

Bore & Stroke 3.1"x3.3"; Tax H.P. 15.38; SAE H.P. 116@6500; Torque 100@5500; P.D. 98 cu.in., 1.6 liter

Man. Trans. 5-speed; EPA Mileage Estimate 25/30

4-PS 2-door Convertible	YELLOW	89.2"	155.4"	2216	15.38	14,800	14,800
4-PS 2-door Convertible	BLACK	89.2"	155.4"	2216	15.38	17,050	17,050

Bore & Stroke 3.1"x3.3"; Tax H.P. 15.38; SAE H.P. 105@6000; Torque 100@4000; P.D. 98 cu.in., 1.6 liter

Auto. Trans. 4-speed; EPA Mileage Estimate 24/28

#### 1992 MAZDA MPV 4 cyl 2.6 liter, G6 Gas Engine

Bore & Stroke 3.6"x3.9"; Tax H.P. 20.74; SAE H.P. 121@4600; Torque 149@3500; D.P. 159.1 cu.in., 2.6 liter

Auto. Trans. 4-speed; EPA Mileage Estimate 18/24 4WD 15/19

2-PS 4-door Van 2WD	G6	110.4"	175.8"	3295	20.74	14,120	14,120
5-PS 4-door Wagon/Van 2WD	G6	110.4"	175.8"	3515	20.74	16,290	16,290
7-PS 4-door Wagon 2WD	G6	110.4"	175.8"	3558	20.74	17,710	17,710

#### 1992 MAZDA MPV V6 cyl 3.0 liter, JE Gas Engine(18 valve)

Bore & Stroke 3.5"x3.0"; Tax H.P. 29.4; SAE H.P. 155@5000; Torque 169@4000; P.D. 180.3 cu.in., 3.0 liter

Auto. Trans. 4-speed; EPA Mileage Estimate 17/22 4WD 15/19

7-PS 4-door Wagon 2WD	JE	110.4"	175.8"	3558	29.4"	18,490	18,490
7-PS 4-door Wagon 4WD	JE	110.4"	175.8"	4010	29.4"	21,360	21,360

#### 1992 MAZDA NAVAJO V6 cyl 4.0 liter, Gas Engine

Bore & Stroke 3.95"x3.32"; Tax H.P. 37.45; SAE H.P. 155@4200; Torque 220@2400; P.D. 245 cu.in., 4.0 liter

Type of Body Pass. Cap.	Model	Wheel Base	Dimensions Inches Lt. x Wt. x Ht.	Ship. Wt. lb.	Tax H.P.	P.O.E. West Coast	P.O.E. East Coast
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Options Lotus Exprit. Destination Charges-\$995; Pearl Metallic Paint-\$4500; Transparent Sunroof Panel (S4)-\$798  
Glass Roof (S4S)-\$795

#### 1994 Mazda 323 RWD L4 cyl 1.6 liter SHOC MPFI Gas Engine(B6E)(16 valve)

Bore & Stroke 3.07x3.29; Tax H.P. 15.08; SAE H.P. 82@5000; Torque 92@2500; 98 cu.in., 1.6 liter

Man. Trans. 5-speed; EPA Mileage Estimate 29/36 Calif 28/35

4-PS 2-dr H.B. Coupe	323	96.5"	163.6" x 65.7" x 54.3"	2238	15.08	8,395	8,395
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Auto. Trans. 4-speed; EPA Mileage Estimate 26/33 Calif 25/32

4-PS 2-dr H.B. Coupe	323	96.5"	163.6" x 65.7" x 54.3"	2271	15.08	9,145	9,145
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Options 323: Destination Charges-\$395 Alaska-\$595; Auto. Trans. 4-speed(AT1)-\$750; Air Conditioning(ACA)-\$850; Plus Pkg 1(PL1)-\$650; Fleet Pkg 2(FL1)-\$940; AM/FM Radio(RA1)-\$330 w/cassette(RAD)-\$330; Power Steering(PS1)-\$250; Floor Mats(FLM)-\$65; Emission (Calif & NY)-\$150

#### 1994 Mazda Protege L4 cyl 1.8 liter SOHC MPFI Gas Engine(BPE)(16 valve)

Bore & Stroke 3.27x3.35; Tax H.P. 17.11; SAE H.P. 103@5500; Torque 111@4000; 112 cu.in., 1.8 liter

Man. Trans. 5-speed; EPA Mileage Estimate 28/36

5-PS 4-dr Sedan DX		98.4"	171.5" x 65.9" x 54.1"	2388	17.11	11,495	11,495
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Auto. Trans. 4-speed; EPA Mileage Estimate 24/31

5-PS 4-dr Sedan DX		98.4"	171.5" x 65.9" x 54.1"	2425	17.11	12,245	12,245
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#### 1994 Mazda Protege RWD L4 cyl 1.8 liter SOHC MPFI Gas Engine(BPD)(16 valve)

Bore & Stroke 3.27x3.35; Tax H.P. 17.11; SAE H.P. 125@6500; Torque 114@4500; 112 cu.in., 1.8 liter

Man. Trans. 5-speed; EPA Mileage Estimate 24/30

5-PS 4-dr Sedan LX		98.4"	171.5" x 65.9" x 54.1"	2487	17.11	13,195	13,195
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Auto. Trans. 4-speed; EPA Mileage Estimate 23/29

5-PS 4-dr Sedan LX		98.4"	171.5" x 65.9" x 54.1"	2540	17.11	13,945	13,945
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Options Protege: Destination Charges-\$395 Alaska-\$595; Auto. Trans. 4-speed(AT1)-\$750; Air Conditioning(ACA)-\$850; Power Sunroof(SR1)-\$560; Wheels (Alloy w/Locks) (1WP)-\$425; DX Convenience Group(1DX)-\$650; DX Fleet Pkg(1FL)-\$1180; AM/FM Radio(RA1)-\$330 w/cassette(RAD)-\$330; Power Steering(PS1)-\$250; Floor Mats(FLM)-\$65; Emission (Calif & NY)-\$150

#### 1994 Mazda 626 RWD L4 cyl 2.0 liter DOHC EMPFI Gas Engine(FS)(16 valve)

Bore & Stroke 3.3"x3.6"; Tax H.P. 17.42; SAE H.P. 118@5500; Torque 127@4500; 122 cu.in., 2.0 liter

Man. Trans. 5-speed; EPA Mileage Estimate 26/34

5PS 4-door Sedan DX		102.8"	184.4" x 68.9" x 55.1"	2606	17.42	14,255	14,255
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5PS 4-door Sedan LS		102.8"	184.4" x 68.9" x 55.1"	2672	17.42	16,540	16,540
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Auto. Trans. 4-speed; EPA Mileage Estimate 23/31

5-PS 4-door Sedan DX		102.8"	184.4" x 68.9" x 55.1"	2637	17.42	15,055	15,055
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5-PS 4-door Sedan LS		102.8"	184.4" x 68.9" x 55.1"	2703	17.42	17,340	17,340
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#### 1994 Mazda 626 FWD V6 cyl 2.5 liter DOHC EMPFI Gas Engine(KL)(24 valve)

Bore & Stroke 3.3"x2.9"; Tax H.P. 26.14; SAE H.P. 164@5600; Torque 160@4800; 153 cu.in., 2.5 liter

Man. Trans. 5-speed; EPA Mileage Estimate 21/26

5-PS 4-door Sedan LS		102.8"	184.4" x 68.9" x 55.1"	2804	26.14	18,700	18,700
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5-PS 4-door Sedan ES		102.8"	184.4" x 68.9" x 55.1"	2906	26.14	21,545	21,545
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Auto. Trans. 4-speed; EPA Mileage Estimate 20/26

5-PS 4-door Sedan LS		102.8"	184.4" x 68.9" x 55.1"	2831	26.14	19,500	19,500
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5-PS 4-door Sedan ES		102.8"	184.4" x 68.9" x 55.1"	2985	26.14	22,345	22,345
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Options 626: Destination Charges-\$395 Alaska-\$595; Auto. Trans. 4-speed(AT1)-\$800; ABS(AB1)-\$800 w/Rear Disc Brakes(AB1)-\$950; Luxury Pkg (1LX)-\$1500; Premium Pkg2(2LX)-\$1875; DX Fleet Pkg (1PO)-\$2070; Floor Mats(FLM)-\$70; Emission (Calif & NY)-\$150

#### 1994 Mazda 929 RWD V6 cyl 3.0 liter DOHC EMPFI Gas Engine(JE-ZE)(24 valve)

Bore & Stroke 3.54x3.0; Tax H.P. 30.08; SAE H.P. 193@5750; Torque 200@3500; 180 cu.in., 3.0 liter

Auto. Trans. 4-speed; EPA Mileage Estimate 19/24

5-PS 4-dr Sedan		112.2"	193.7" x 70.7" x 54.9"	3627	30.08	31,500	31,500
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5-PS 4-dr Sedan w/Leather Pkg		112.2"	193.7" x 70.7" x 54.9"	3604	30.08	33,350	33,350
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5-PS 4-dr Sedan w/Premium Pkg		112.2"	193.7" x 70.7" x 54.9"	3640	30.08	35,600	35,600
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Options 929: Destination Charges-\$395 Alaska-\$595; Leather Pkg(1LE)-\$1850; Premium Pkg(1PR)-\$4100; Solar Ventilation System(MR2)-\$650; Cold Pkg(1CO)-\$600; Floor Mats(FLM)-\$100; Emission (Calif & NY)-\$150

#### 1994 Mazda MX3 L4 cyl 1.6 liter DOHC EFI Gas Engine(B6-ZE)(16 valve)

Bore & Stroke 3.07x3.29; Tax H.P. 15.08; SAE H.P. 105@6200; Torque 100@3600; 98 cu.in., 1.6 liter

Man. Trans. 5-speed; EPA Mileage Estimate 29/37

4-PS 2-dr Coupe		96.3"	165.7" x 66.7" x 51.6"	2443	15.08	13,595	13,595
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Auto. Trans. 4-speed; EPA Mileage Estimate 25/34

4-PS 2-dr Coupe		96.3"	165.7" x 66.7" x 51.6"	2507	15.08	14,345	14,345
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#### 1994 Mazda MX3 V6 cyl 1.8 liter DOHC EFI Gas Engine(K8D)(24 valve)



## CODES FOR OBJECT CONTACTED

(57) Fence

(58) Wall

- (59) Building  
(60) Ditch or culvert  
(61) Ground  
(62) Fire hydrant  
(63) Curb  
(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

### Collision with Nonfixed Object

(70) Passenger car, light truck, van, or other vehicle not in-transport

- (71) Medium/heavy truck or bus not in-transport  
(72) Pedestrian  
(73) Cyclist or cycle  
(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

- (77) Train  
(78) Trailer, disconnected in transport  
(79) Object fell from vehicle in-transport  
(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

- (98) Other event (specify):

(99) Unknown event or object

[illegible]

**COLLISION DEFORMATION CLASSIFICATION****HIGHEST DELTA "V"**

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>07</u>	7. <u>B</u>	8. <u>Y</u>	9. <u>E</u>	10. <u>W</u>	11. <u>06</u>

**Second Highest Delta "V"**

12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_ 16. \_\_\_\_\_ 17. \_\_\_\_\_ 18. \_\_\_\_\_ 19. \_\_\_\_\_

**CRUSH PROFILE IN CENTIMETERS**

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

**HIGHEST DELTA "V"**

20. L	21. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	22. ± D
<u>152</u>	<u>091</u>	<u>082</u>	<u>079</u>	<u>077</u>	<u>072</u>	<u>070</u>	<u>0019</u>

**Second Highest Delta "V"**

23. L	24. C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	25. ± D
_____	_____	_____	_____	_____	_____	_____	_____

**26. Undeformed End Width**

(Coded when highest severity impact is an end plane impact.)

\_\_\_\_\_ Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

152

**27. Direct Damage Width**

(For highest severity impact)

\_\_\_\_\_ Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

115

**28. Original Wheelbase**

\_\_\_\_\_ Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

245

**29. Original Average Track Width**

\_\_\_\_\_ Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

146

**FUEL SYSTEM**

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle  
And/OR A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

35. Location of Fuel Tank-1 Filler Cap

36. Location of Fuel Tank-2 Filler Cap

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle)  
on left side plane  
(3) Aft of center of the rear wheels (rear axle)  
on right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear  
axle) on left side plane  
(7) Over the center of the rear wheels (rear  
axle) on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

38. Type of Fuel Tank-2

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

40. Location of Fuel Tank-2

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

42. Damage to Fuel Tank-2

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

**FIRE OCCURRENCE**

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

- (9) Unknown



43. Leakage Location of Fuel System-1

2

44. Leakage Location of Fuel System-2

0

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1

01

46. Fuel Type-2

00*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## INTERIOR VEHICLE FORM

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9623

3. Vehicle Number 01

### INTEGRITY

4. Passenger Compartment Integrity 07  
(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 3 7. LR 0 8. RR 0 9. TG/H 3

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

- (0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

### GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 0 19. RR 0  
20. BL 2 21. Roof 0 22. Other 0

- (0) No glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted (original)
- (4) AS-2 - Tempered-with after market tint
- (5) AS-3 - Tempered-tinted (with additional after market tint)
- (6) AS-14 - Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 0 27. RR 0  
28. BL 1 29. Roof 0 30. Other 0

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

31. WS 2 32. LF 6 33. RF 6 34. LR 0 35. RR 0  
36. BL 6 37. Roof 0 38. Other 0

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1  
44. BL 1 45. Roof 0 46. Other 0

- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

**STEERING RIM/SPOKE DEFORMATION**

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
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No	—	DEFORMATION	=	N
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## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>23</u>	48. <u>21</u>	49. <u>6</u>	50. <u>2</u>
2nd	51. <u>22</u>	52. <u>21</u>	53. <u>6</u>	54. <u>2</u>
3rd	55. <u>21</u>	56. <u>21</u>	57. <u>6</u>	58. <u>2</u>
4th	59. <u>23</u>	60. <u>25</u>	61. <u>6</u>	62. <u>2</u>
5th	63. <u>21</u>	64. <u>25</u>	65. <u>6</u>	66. <u>2</u>
6th	67. <u>22</u>	68. <u>25</u>	69. <u>6</u>	70. <u>2</u>
7th	71. <u>23</u>	72. <u>19</u>	73. <u>3</u>	74. <u>1</u>
8th	75. <u>22</u>	76. <u>19</u>	77. <u>3</u>	78. <u>1</u>
9th	79. <u>21</u>	80. <u>19</u>	81. <u>3</u>	82. <u>1</u>
10th	83. <u>23</u>	84. <u>13</u>	85. <u>3</u>	86. <u>1</u>

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify)

(99) Unknown

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify):

## Exterior Components

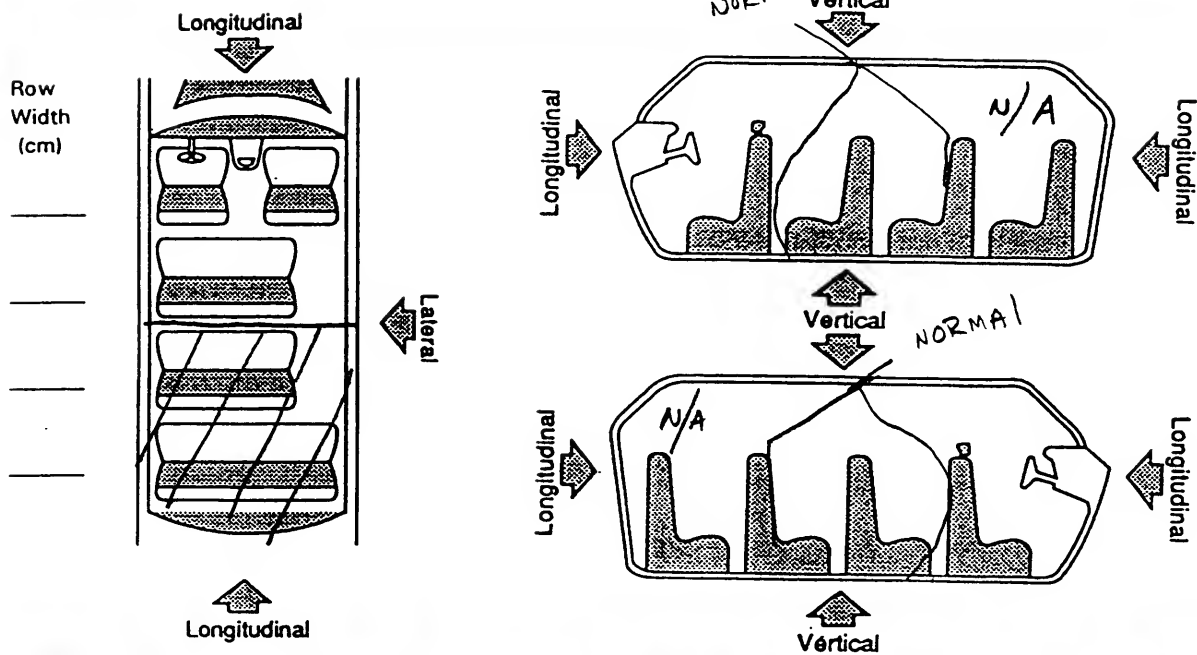
- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

**INTRUSION WORKSHEET****NOTE: SKETCH INTRUDED AREAS**

Pass  
seat  
cush  
67  
from  
TOEPAN  
DRIVER  
IS  
57

LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
21	2 <sup>ND</sup> seatback	-	94	=	LONG
22	" "	-	101	=	LONG
23	" "	-	115	=	LONG
21	2 <sup>ND</sup> seat	-	51	=	VERT
22	cushion	-	44	=	VERT
23	" "	-	57	=	VERT
21	2 <sup>ND</sup> seat cushion	-	67	=	LONG
22	" "	-	66	=	LONG
23	" "	-	72	=	LONG
23	B-Pillar	-	100	=	LAT
21	2 <sup>ND</sup> seatback	-	0	=	VERT
22	" "	-	+7	=	VERT
23	" "	-	+5	=	VERT
13	seatback	-	63	=	LONG
11	seatback	-	49	=	LONG

③  
②  
①  
⑤  
⑥  
④

13 SIDERAIL

Document no more than the 15 most severe intrusions

100

LAT

## STEERING COLUMN

## INSTRUMENT PANEL

## 87. Steering Column Type

- (1) Fixed column  
(2) Tilt column  
(3) Telescoping column  
(4) Tilt and telescoping column  
(8) Other column type (specify):

(9) Unknown

## 88. Tilt Steering Column Adjustment

- (0) No tilt steering column  
(1) Full up  
(2) Between full up and center  
(3) Center  
(4) Between center and full down  
(5) Full down  
(9) Unknown

## 89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column  
(1) Full back  
(2) Between full back and midpoint  
(3) Midpoint  
(4) Between midpoint and full forward  
(5) Full forward  
(9) Unknown

## 90. Steering Rim/Spoke Deformation

- Code actual measured  
deformation to the nearest centimeter  
(00) No steering rim deformation  
(01-14) Actual measured value in centimeters  
(15) 15 centimeters or more  
(98) Observed deformation cannot be measured  
(99) Unknown

## 91. Location of Steering Rim/Spoke Deformation

- (00) No steering rim deformation

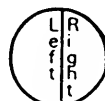
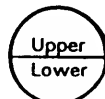
## Quarter Sections

- (01) Section A  
(02) Section B  
(03) Section C  
(04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
(06) Lower half of rim/spoke  
(07) Left half of rim/spoke  
(08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
(10) Undetermined location  
(99) Unknown

## 92. Odometer Reading

\_\_\_\_\_ kilometers

Code to the nearest 1,000 kilometers

- (000) No odometer  
(001) Less than 1,500 kilometers  
(500) 499,500 kilometers or more  
(999) Unknown

117,000 miles X 1.6093 = 116,824 kilometers

Source: ODOMETER

## 93. Instrument Panel Damage from Occupant Contact?

- (0) No  
(1) Yes  
(9) Unknown

## 94. Type of Knee Bolster Covering

- (0) No knee bolster  
(1) Padded  
(2) Rigid plastic  
(8) Other (specify):  
(9) Unknown

## 95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster  
(1) No deformation  
(2) Yes - deformation  
(9) Unknown

## 96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door  
(1) No - door did not open  
(2) Yes - door opened  
(9) Unknown

## 97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment  
(1) Adaptive driving equipment installed (Check all that apply.)  
[ ] Hand controls for braking/acceleration  
[ ] Steering control devices (attached to OEM steering wheel)  
[ ] Steering knob attached to steering wheel  
[ ] Low effort power steering (unit or device)  
[ ] Replacement steering wheel (i.e., reduced diameter)  
[ ] Joy-stick steering controls  
[ ] Wheelchair tie-downs  
[ ] Modification to seat belts (specify):  
[ ] Additional or relocated switches (specify):  
[ ] Raised roof  
[ ] Wall-mounted head rest (used behind wheelchair)  
[ ] Other adaptive device (specify):

(9) Unknown



# FIRST SEAT FRONTAL AIR BAGS

**NOTES:** Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	0	0
B-Flaps open at tear points?	0	0
C-Flaps damaged?	0	0
D-Air bag damaged?	00	00
E-Source of air bag damage	00	00
F-Air bag tethered?	0	0
G-Air bag have vent ports?	0	0
H-Other occupant contact air bag?	0	0
I-Occupant wearing eyewear?	0	0

## A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

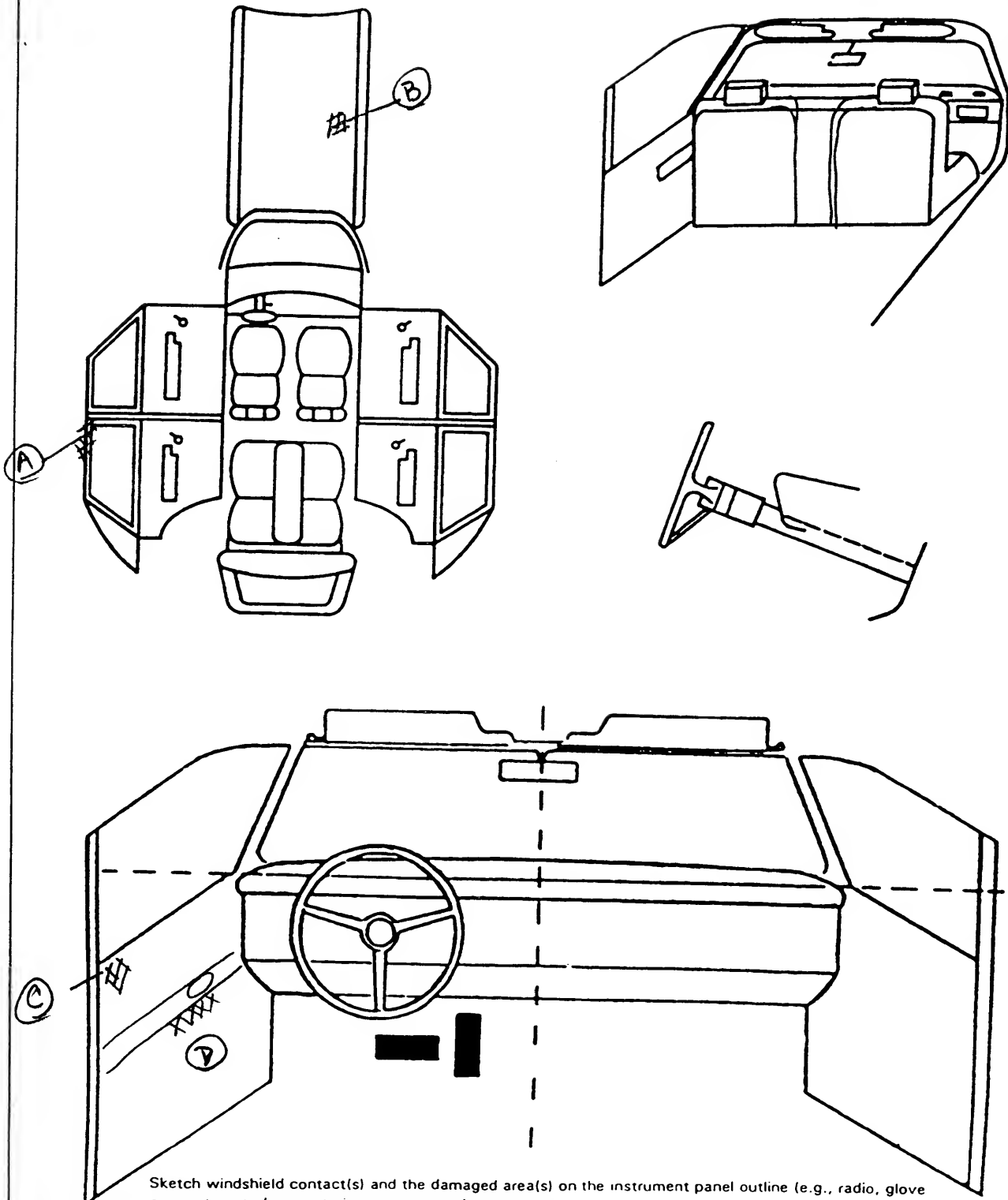
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## I-Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	057	01	HEAD	SKIN / scuffing	1
B	205	02	HEAD	SKIN / scuffing	1
C	051	01	② SIDE	scuff	1
D	052	01	② SIDE	scuff	1
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):  
 RIGHT SIDE  
 (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):  
 AIR BAG  
 (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify):  
 (195) Other air bag compartment cover (specify):

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown



**AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**AIR BAGS**

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function	0	0	
	Deployment	0	0	
	Failure	0	0	

**Air Bag System Availability/Function**

(0) Not equipped/not available

(1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled

(9) Unknown

**Air Bag System Deployment****(This Occupant Position)**

(0) Not equipped/not available

(1) Deployed during accident (as a result of impact)

(2) Deployed inadvertently just prior to accident

(3) Deployed, accident sequence undetermined

(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(5) Unknown if deployed

(7) Nondeployed

(9) Unknown

**Are There Indications of Air Bag****System Failure? (This Occupant Position)**

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(9) Unknown

**AUTOMATIC BELTS**

		Left	Right
F I R S T	A-Availability/Function	1	1
	B-Use	1	1
	C-Type	2	2
	D-Proper Use		
	E-Failure Modes	1	1

**A-Automatic (Passive) Belt System Availability/Function**

(0) Not equipped/not available

(1) 2 point automatic belts

(2) 3 point automatic belts

(3) Automatic belts - type unknown

*Non-functional*

(4) Automatic belts destroyed or rendered inoperative

(9) Unknown

**B-Automatic (Passive) Belt System Use**

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Automatic belt in use

(2) Automatic belt not in use (manually disconnected, motorized track inoperative)

(3) Automatic belt use unknown

(9) Unknown

**C-Automatic (Passive) Belt System Type**

(0) Not equipped/not available

(1) Non-motorized system

(2) Motorized system

(9) Unknown

**D-Proper Use of Automatic (Passive) Belt System**

(0) Not equipped/not available/not used

(1) Automatic belt used properly

(2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

(3) Automatic shoulder belt worn under arm

(4) Automatic shoulder belt worn behind back

(5) Automatic belt worn around more than one person

(6) Lap portion of automatic belt worn on abdomen

(7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly

with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown

**E-Automatic (Passive) Belt Failure Modes During Accident**

(0) Not equipped/not available/not in use

(1) No automatic belt failure(s)

(2) Torn webbing (stretched webbing not included)

(3) Broken buckle or latchplate

(4) Upper anchorage separated

(5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	3	0	3
	B-Evidence of usage	03		03
	C-Used in this crash?	03		03
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			
SECOND	A-Availability	4		4
	B-Evidence of usage	00		00
	C-Used in this crash?	00		00
	D-Proper Use	0		0
	E-Failure Modes	0		0
	F-Anchorage Adjustment	0		0
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

## A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_
- (9) Unknown

## B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): \_\_\_\_\_
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

## D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_
- (8) Other improper use of manual belt system (specify): \_\_\_\_\_
- (9) Unknown

## E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

## F-Shoulder Belt Upper Anchorage Adjustment

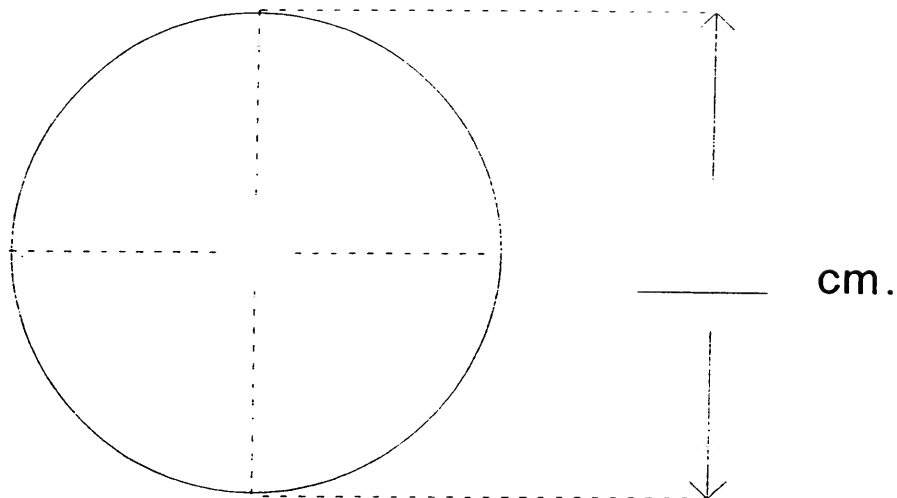
- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

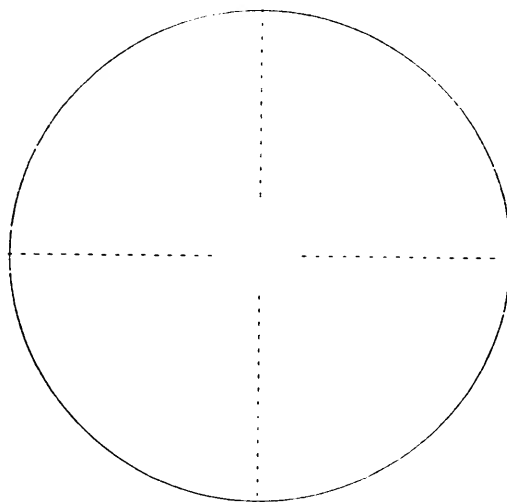
## DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)

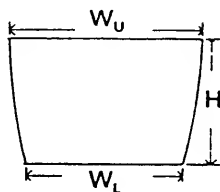


*Not Applicable*

## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

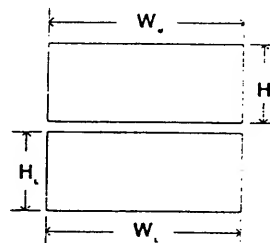
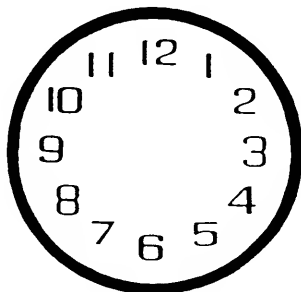




**DRIVER AIR BAG SKETCHES (Cont'd)****3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)**width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_height ( $H$ ) \_\_\_\_\_**4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)**

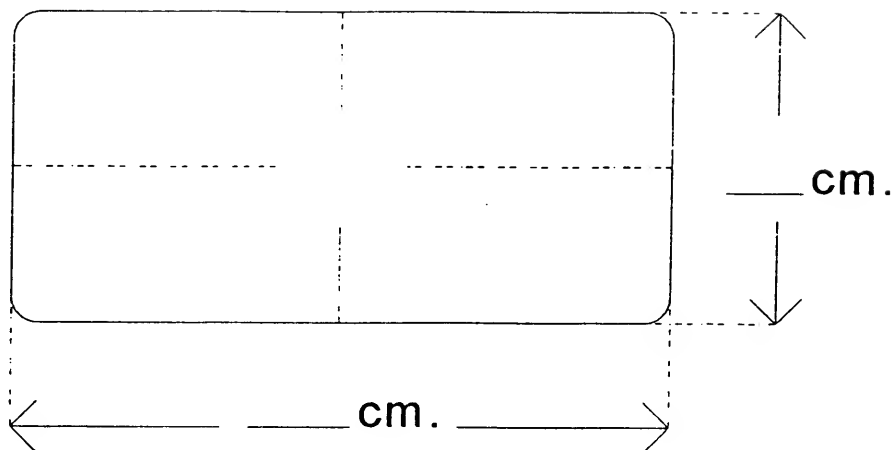
a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_height ( $H_U$ ) \_\_\_\_\_ height ( $H_L$ ) \_\_\_\_\_**5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE****6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS****7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS**

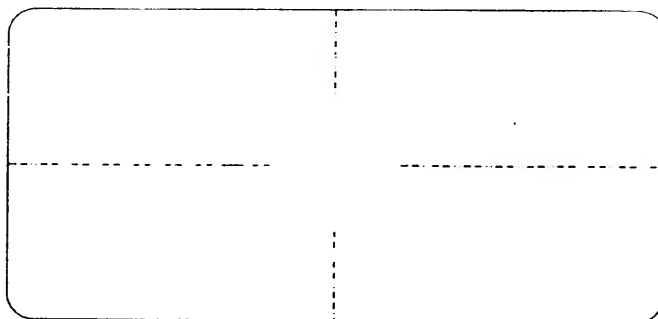
## PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



*Not Applicable*

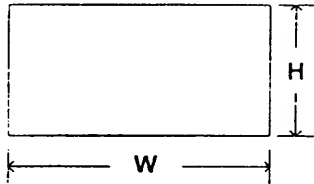
## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



**PASSENGER AIR BAG SKETCHES (Cont'd)****3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)**

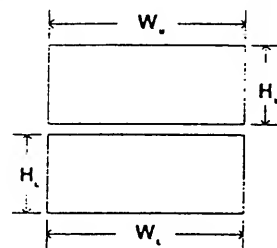
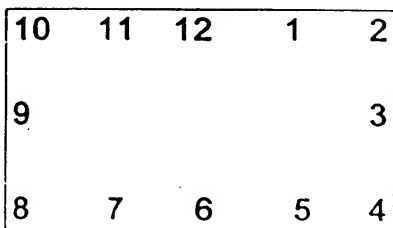
width (W) \_\_\_\_\_

height (H) \_\_\_\_\_

**4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)**

a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_width ( $W_L$ ) \_\_\_\_\_height ( $H_U$ ) \_\_\_\_\_height ( $H_L$ ) \_\_\_\_\_**5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE****6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS****7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS**



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

**"OTHER" AIR BAG SKETCHES (Cont'd)**

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

**HEAD RESTRAINTS/SEAT EVALUATION**

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I R S T	A-Head Restraint Type/Damage	1		1
	B-Seat Type	02		02
	C-Seat Orientation	1		7
	D-Seat Track Position	2		3
	E-Seat Back Incline Pre/Post Impact	15		21
	F-Seat Performance	6		3
S E C O N D	A-Head Restraint Type/Damage			
	B-Seat Type	05		05
	C-Seat Orientation	1		1
	D-Seat Track Position	1		1
	E-Seat Back Incline Pre/Post Impact	01		01
	F-Seat Performance	6		6
T H I R D	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
O T H E R	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**



## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat		None				
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

### 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

### 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

**A-Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**B-Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): \_\_\_\_\_
- (99) Unknown

**C-Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**D-Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat

- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**E-Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

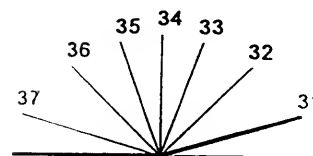
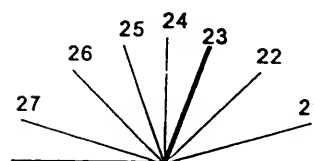
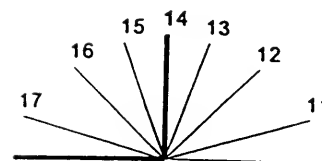
**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

**F-Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): folding locks
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection  
(2) Partial ejection  
(3) Ejection, Unknown degree  
(9) Unknown

**Ejection Area**

- (1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):

**(5) Integral structure****(8) Other medium (specify):****(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note on vehicle interior sketch)

**NASS CDS VEHICLE FORMS: VEHICLE #2**





## GENERAL VEHICLE FORM

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

### VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

CADILLAC  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

SEDAN Deville  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1G6CD53B3N4  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)

No VIN—Code all zeros

Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

### OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

\_\_\_ mph X 1.6093 = \_\_\_ kmph

12. Speed Limit

(000) No statutory limit

Code posted or statutory speed limit in kmph  
(999) Unknown

60 mph X 1.6093 = 96.56 kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver

Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

15. Police Reported Other Drug Presence For Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):  
(8) No driver present  
(9) Unknown

# CODES FOR BODY TYPE

BEST AVAILABLE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,536$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,536$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,536$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,536$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,536$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,536$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,536$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,536$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,536$ kgs GVWR)

- (60) Step van ( $> 4,536$  kgs GVWR)
- (61) Single unit straight truck ( $4,536$  kgs  $<$  GVWR  $\leq 8,845$  kgs)
- (62) Single unit straight truck ( $8,845$  kgs  $<$  GVWR  $\leq 11,793$  kgs)
- (63) Single unit straight truck ( $> 11,793$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 0  
(0) Non-interchange area and non-junction  
(1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
(3) Driveway, alley access related  
(4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 1  
(0) Not physically divided (two way traffic)  
(1) Divided trafficway-median strip without positive barrier  
(2) Divided trafficway-median strip with positive barrier  
(3) One way traffic  
(9) Unknown

21. Number Of Travel Lanes 3

- (1) One  
(2) Two  
(3) Three  
(4) Four  
(5) Five  
(6) Six  
(7) Seven or more  
(9) Unknown

22. Roadway Alignment 2

- (1) Straight  
(2) Curve right  
(3) Curve left  
(9) Unknown

23. Roadway Profile 2

- (1) Level  
(2) Uphill grade (>2%)  
(3) Hill crest  
(4) Downhill grade (>2%)  
(5) Sag  
(9) Unknown

24. Roadway Surface Type 1

- (1) Concrete  
(2) Bituminous (asphalt)  
(3) Brick or block  
(4) Slag, gravel, or stone  
(5) Dirt  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

25. Roadway Surface Condition 1

- (1) Dry  
(2) Wet  
(3) Snow or slush  
(4) Ice  
(5) Sand, dirt, or oil  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

26. Light Conditions 1

- (1) Daylight  
(2) Dark  
(3) Dark, but lighted  
(4) Dawn  
(5) Dusk  
(9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions  
(1) Rain  
(2) Sleet/hail  
(3) Snow  
(4) Fog  
(5) Rain and fog  
(6) Sleet and fog  
(7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
(9) Unknown

28. Traffic Control Device 5

- (0) No traffic control(s)  
(1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
(3) Yield sign  
(4) School zone sign  
(5) Other regulatory sign (specify):  
SPD Limit

- (6) Warning sign (not RR crossing)  
(7) Unknown sign  
(8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 2

- (0) No traffic control device  
(1) Traffic control device not functioning (specify): \_\_\_\_\_  
(2) Traffic control device functioning properly  
(9) Unknown

**PRECRAASH DRIVER RELATED DATA****30. Driver's Distraction/Inattention To Driving**  
(Prior To Recognition Of Critical Event)

- (00) No driver present  
(01) Attentive or not distracted  
(02) Looked but did not see

**Distractions**

(03) By other occupant(s), (specify): \_\_\_\_\_

(04) By moving object in vehicle (specify): \_\_\_\_\_

(05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_

(06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_

(07) While adjusting climate controls

(08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_

(09) While using other device/controls integral to vehicle (specify): \_\_\_\_\_

(10) While using or reaching for device/object brought into vehicle (specify): \_\_\_\_\_

(11) Sleepy or fell asleep

(12) Distracted by outside person, object, or event (specify): \_\_\_\_\_

(13) Eating or drinking

(14) Smoking related

(97) Distracted/inattentive, details unknown

(98) Other, distraction (specify): \_\_\_\_\_

(99) Unknown

**31. Pre-Event Movement (Prior to Recognition of Critical Event)**

- (00) No driver present  
(01) Going straight  
(02) Decelerating in traffic lane  
(03) Accelerating in traffic lane  
(04) Starting in traffic lane  
(05) Stopped in traffic lane  
(06) Passing or overtaking another vehicle  
(07) Disabled or parked in travel lane  
(08) Leaving a parking position  
(09) Entering a parking position  
(10) Turning right  
(11) Turning left  
(12) Making a U-turn  
(13) Backing up (other than for parking position)  
(14) Negotiating a curve  
(15) Changing lanes  
(16) Merging  
(17) Successful avoidance maneuver to a previous critical event  
(97) Other (specify): \_\_\_\_\_  
(99) Unknown

**32. Critical Precrash Event****THIS VEHICLE LOSS OF CONTROL DUE TO:**

- (01) Blow out or flat tire  
(02) Stalled engine  
(03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_  
(04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_  
(05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_  
(06) Traveling too fast for conditions  
(08) Other cause of control loss (specify): \_\_\_\_\_  
(09) Unknown cause of control loss

**THIS VEHICLE TRAVELLING**

- (10) Over the lane line on left side of travel lane  
(11) Over the lane line on right side of travel lane  
(12) Off the edge of the road on the left side  
(13) Off the edge of the road on the right side  
(14) End departure  
(15) Turning left at intersection  
(16) Turning right at intersection  
(17) Crossing over (passing through) intersection  
(18) This vehicle decelerating  
(19) Unknown travel direction

**OTHER MOTOR VEHICLE IN LANE**

- (50) Other vehicle stopped  
(51) Traveling in same direction with lower steady speed  
(52) Traveling in same direction while decelerating  
(53) Traveling in same direction with higher speed  
(54) Traveling in opposite direction  
(55) In crossover  
(56) Backing  
(59) Unknown travel direction of other motor vehicle in lane

**OTHER MOTOR VEHICLE ENCROACHING INTO LANE**

- (60) From adjacent lane (same direction)—over left lane line  
(61) From adjacent lane (same direction)—over right lane line  
(62) From opposite direction—over left lane line  
(63) From opposite direction—over right lane line  
(64) From parking lane  
(65) From crossing street, turning into same direction  
(66) From crossing street, across path  
(67) From crossing street, turning into opposite direction  
(68) From crossing street, intended path not known  
(70) From driveway, turning into same direction  
(71) From driveway, across path  
(72) From driveway, turning into opposite direction  
(73) From driveway, intended path not known  
(74) From entrance to limited access highway  
(78) Encroachment by other vehicle—details unknown

**PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST**

- (80) Pedestrian in roadway  
(81) Pedestrian approaching roadway  
(82) Pedestrian—unknown location  
(83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_  
(84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_  
(85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

**OBJECT OR ANIMAL**

- (87) Animal in roadway  
(88) Animal approaching roadway  
(89) Animal—unknown location  
(90) Object in roadway  
(91) Object approaching roadway  
(92) Object—unknown location  
(98) Other critical precrash event (specify): \_\_\_\_\_  
(99) Unknown



33. Attempted Avoidance Maneuver 09
- (00) No driver present
  - (01) No avoidance maneuver
  - (02) Braking (no lockup)
  - (03) Braking (lockup)
  - (04) Braking (lockup unknown)
  - (05) Releasing brakes
  - (06) Steering left
  - (07) Steering right
  - (08) Braking and steering left
  - (09) Braking and steering right
  - (10) Accelerating
  - (11) Accelerating and steering left
  - (12) Accelerating and steering right
  - (98) Other action (specify): \_\_\_\_\_

(99) Unknown

34. Pre-Impact Stability 2
- (0) No driver present
  - (1) Tracking
  - (2) Skidding longitudinally—rotation less than 30 degrees
  - (3) Skidding laterally—clockwise rotation
  - (4) Skidding laterally—counterclockwise rotation
  - (7) Other vehicle loss-of-control (specify): \_\_\_\_\_

(9) Precrash stability unknown

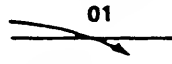


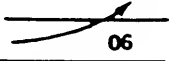
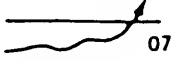
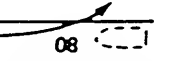
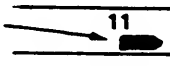
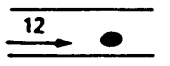
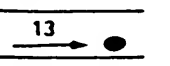
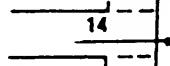

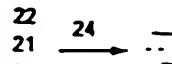
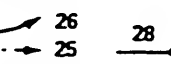
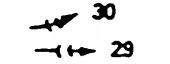

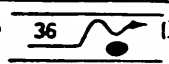
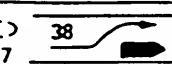
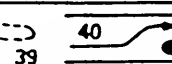
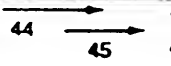
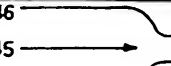
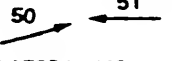

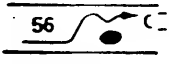
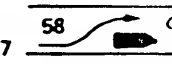
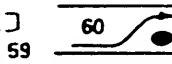




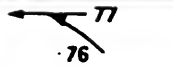

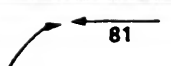
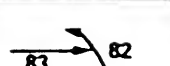
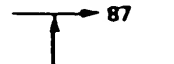

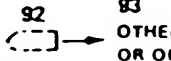
35. Pre-Impact Location 1
- (0) No driver present
  - (1) Stayed in original travel lane
  - (2) Stayed on roadway but left original travel lane
  - (3) Stayed on roadway, not known if left original travel lane
  - (4) Departed roadway
  - (5) Remained off roadway
  - (6) Returned to roadway
  - (7) Entered roadway
  - (9) Unknown

36. Accident Type 66  
(Note: Applicable codes on back of this page)

- (00) No impact  
Code the number of the diagram that best describes the accident circumstance
- (98) Other accident type (specify): \_\_\_\_\_

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 26, 27	 24 DECEL. 28, 30, 31	 26 AVOID COLLISION WITH VEH.	(EACH • 32) SPECIFICS OTHER (EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 45	 46 45 47	(EACH • 48) SPECIFICS OTHER (EACH • 49) SPECIFICS UNKNOWN		
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	51 (EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER (EACH • 63) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	65 (EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 72	(EACH • 74) SPECIFICS OTHER (EACH • 75) SPECIFICS UNKNOWN	
	K Turn Into Path	 77 76	 79 78	 81 80	 83 82	(EACH • 84) SPECIFICS OTHER (EACH • 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 87 86	 88 89	(EACH • 90) SPECIFICS OTHER		(EACH • 91) SPECIFICS UNKNOWN
VI Miscellaneous	M Backing Etc	 92 BACKING VEH.	93 OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

## OCCUPANT RELATED

37. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
38. Number of Occupants This Vehicle 01  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
39. Number of Occupant Forms Submitted 01

## AIR BAG RELATED

40. Is this an AOPS Vehicle? 1  
(0) No (includes unknown)  
(1) Yes - researcher determined  
(2) VIN determined air bag system  
(3) VIN determined automatic (passive) belts  
(4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 2  
(0) Not equipped or not available  
(1) No air bags deployed  
*Single Air Bag Vehicle*  
(2) Driver air bag deployed  
(3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
(4) Driver side only deployed  
(5) Passenger side only deployed  
(6) Driver and passenger side deployed  
(7) Driver and passenger side unknown if deployed  
(8) Air bag(s) deployed, details unknown  
(9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
(0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

## VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1.630  
Code weight to nearest 10 kilograms.  
(045) Less than 454 kilograms  
(612) 6,124 kilograms or more  
(999) Unknown  
3,591 lbs X .4536 = 1.629 kgs  
Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0.000  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(454) 4,536 kilograms or more  
(999) Unknown  
10 lbs X .4536 = 4.54 kgs  
Source: \_\_\_\_\_

## ROLLOVER DATA

45. Rollover 00  
(00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
(01-16) Code the number of quarter turns  
(17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
(99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
(00) No rollover  
(01) Trip-over  
(02) Flip-over  
(03) Turn-over  
(04) Climb-over  
(05) Fall-over  
(06) Bounce-over  
(07) Collision with another vehicle  
(08) Other rollover initiation type specify): \_\_\_\_\_  
(98) Rollover--end-over-end  
(99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
(0) No rollover  
(1) On roadway  
(2) On shoulder--paved  
(3) On shoulder--unpaved  
(4) On roadside or divided trafficway median  
(8) Rollover--end-over-end  
(9) Unknown
48. Rollover Initiation Object Contacted 00  
(Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
(0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify): \_\_\_\_\_  
(6) Non-contact rollover forces (specify): \_\_\_\_\_  
(8) Rollover--end-over-end  
(9) Unknown
50. Direction of Initial Roll 0  
(0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(8) Rollover--end-over-end  
(9) Unknown roll direction

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**51. Front Override/Underride (this Vehicle) 452. Rear Override/Underride (this Vehicle) 0

- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):  
\_\_\_\_\_

*Underride (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):  
\_\_\_\_\_

(7) Medium/heavy truck or bus override (of any configuration)

(9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value

(996) Non-horizontal impact

(997) Noncollision

(998) Impact with object

(999) Unknown

53. Heading Angle For This Vehicle 00054. Heading Angle For Other Vehicle 310**RECONSTRUCTION DATA**55. Towed Trailing Unit 0

(0) No towed unit

(1) Yes—towed trailing unit

(9) Unknown

56. Documentation of Trajectory Data for This Vehicle 1

(0) No

(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0

(0) Not collision (for highest delta V) with tree or pole

(1) Not damaged

(2) Cracked/sheared

(3) Tilted &lt;45 degrees

(4) Tilted ≥45 degrees

(5) Uprooted tree

(6) Separated pole from base

(7) Pole replaced

(8) Other (specify):  
\_\_\_\_\_

(9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

*Delta V Calculated*

(01) Reconstruction program-damage only routine

(02) Reconstruction program-damage and trajectory routine

(03) Missing vehicle algorithm

*Delta V Not Calculated*

(04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

(05) Rollover

(06) Other non-horizontal forces

(07) Sideswipe type damage

(08) Severe override

(09) Yielding object

(10) Overlapping damage

(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(98) Other, (specify):  
\_\_\_\_\_  
\_\_\_\_\_



## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

37 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

60. Longitudinal Component of  
Delta V

Highest

-37 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE:   000 means greater than  
-0.5 kmph and less than +0.5 kmph)  
(±160) ±159.5 kmph and above  
(  999) Unknown

61. Lateral Component of Delta V

Highest

+6 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE:   000 means greater than -0.5 kmph and  
less than +0.5 kmph)  
(±160) ±159.5 kmph and above  
(  999) Unknown

62. Energy Absorption

Highest

99,148 Nearest 100 joules (highest)           Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

63. Impact Speed

Highest

998 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(998) Trajectory algorithm not run  
(999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program  
Results (For Highest Delta V)

- (0) No reconstruction  
(1) Collision fits model — results appear reasonable  
(2) Collision fits model — results appear high  
(3) Collision fits model — results appear low  
(4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

38.8 Nearest kmph (highest)           Nearest kmph (secondary)

(NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

### ESTIMATED DELTA V

### INSPECTION TYPE

66. Estimated Highest Delta V (Researcher Determined) 0  
 (0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph
- (2)  $\geq 10$  kmph but  $< 25$  kmph
- (3)  $\geq 25$  kmph but  $< 40$  kmph
- (4)  $\geq 40$  kmph but  $< 55$  kmph
- (5)  $\geq 55$  kmph

*Other estimates of damage severity*

- (6) Minor
- (7) Moderate
- (8) Severe
- (9) Unknown

67. Type of Vehicle Inspection 3  
 (0) No inspection  
 (1) Vehicle fully repaired-no damage evident  
 (2) Partial inspection (specify): \_\_\_\_\_

(3) Complete inspection

### DELTA V EVENT NUMBER

68. Delta V Event Number L  
 \_\_\_\_\_ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle  
 (99) Unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
 OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



# EXTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number <u>10</u>	3. Vehicle Number <u>02</u>
2. Case Number - Stratum <u>9623</u>	

## VEHICLE IDENTIFICATION

VIN 1G6CD53B3N4 Model Year 92  
Vehicle Make (specify): CADILLAC Vehicle Model (specify): SPN Deville

## LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	BC OVER 120 CM	ACROSS front Bumper	C-1

## CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific Impact Number	Plane of Impact C-Measurements	Direct Damage		Field L	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>	C <sub>6</sub>	±D
		Width (CDC)	Max Crush								
01	@ Bumper	120	61	135	61	41	27	23	20	8	
	FREE		9		9	9	6	6	9	9	
	Resultant		52		52	32	21	17	11	0	-29
01	Above Bumper		85	135	79	85	81	62	58	49	
	FREE		23		23	23	19	19	23	23	
	Resultant		62		56	62	62	43	35	26	-29
	AVG	120	62	135	52	47	41.5	30	23	13	-29
							↓				
							42				

## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase *Branham's* { 113.8 inches x 2.54 = 289.1 cm  
 Overall Length { 206.3 inches x 2.54 = 524.0 cm  
 Maximum Width 73.4 inches x 2.54 = 186.4 cm  
 Curb Weight 3,591 pounds x 0.4536 = 1,628.9 kg  
 Average Track <sup>60.2</sup><sub>59.9</sub> 60.05 inches x 2.54 = 152.53 cm  
 Front Overhang        inches x 2.54 = 115 cm  
 Rear Overhang        inches x 2.54 = 125 cm  
 Undeformed End Width        inches x 2.54 = 178 cm  
 Engine Size: cyl/displ.        cc x 0.001 = 4.9 L  
*V8, 4-speed*  
*automatic, FWD,*  
*6-passengers*  
300 CID x 0.0164 = 4.9 L

## SPECIAL CRASH INVESTIGATION ADDENDUM

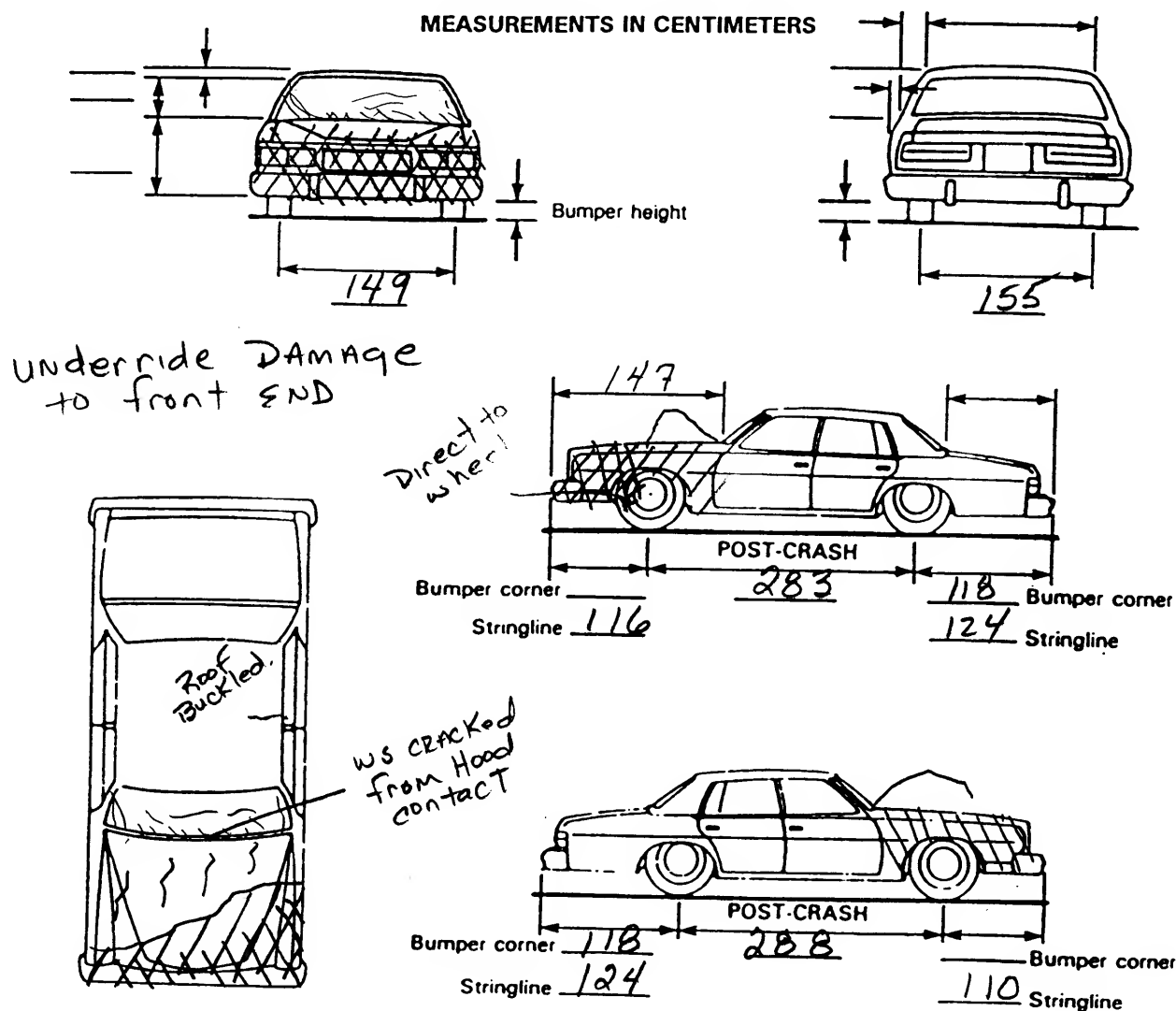
Submodel Designation: {specify}		Color: {specify}	Repair Cost: \$
Transmission: {circle}	<u>Automatic</u>   Manual	Speed: 3-speed   <u>4-speed</u>   5-speed   Other:	
Steering: {circle}	<u>Power-assisted</u>   Manual	Type: <u>rack-and-pinion</u>   worm-and-gear   Other	
{please describe}:			
Brakes: {circle}	<u>Power-assisted</u>   Manual	Type: 4-wheel disc   4-wheel drum   4-wheel hydraulic   front disc, rear drum   Other:	
Observed Defects: {specify}			
Fleet Type: {circle}	<u>Private vehicle</u>   Rental vehicle   Leased vehicle   Commercial vehicle   Other		
{please describe}:			



## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>1</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		<b>b. Tire deflated</b> RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>289</u> cm Overall Length <u>524</u> cm Maximum Width <u>186</u> cm Curb Weight <u>1,629</u> kg Average Track <u>153</u> cm Front Overhang <u>115</u> cm Rear Overhang <u>125</u> cm Undeformed End Width <u>178</u> cm Engine Size: cyl./displ. <u>V-8, 4.9</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF ± _____ ° LF ± _____ ° RR ± _____ ° LR ± _____ ° Within ± 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input type="checkbox"/> Yes <input type="checkbox"/> No						<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD	
						Approximate Cargo Weight _____ kg	

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

Type of Body Pass. Cap.	Model	Wheel Base	Total Length	Ship. Wt.	Tax H.P.	Factory List Price	Factory Del'd Price
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Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; SAE H.P. 200@4100; Torque 275@3000; P.D. 300 cu.in., 4.9 liter

Auto. Trans. 4-speed w/overdrive

5-PS 2-dr Coupe	EL57	108.0"	202.2"	3604	41.93	n/a	33,295
5-PS 2-dr Coupe Touring	YP5	108.0"	202.2"	3604	41.93	n/a	37,295

Options Eldorado: Calif. Emissions System(NB2)-\$100; Paint (Firemist-YL2)(Diamond Ext. color-V1F)-\$240; Leather Interior(YL1)-\$650; Option Pkg(1SB)-\$181; Seating Pkg Leather only(AQ9)-\$340; Heated Windshield System(C50)-\$309; Astro Roof(CF5)-\$1550; Auto Day/Night Mirror(DD8)-\$110; Heated F/Seats(KA1)-\$120; Sport Interior(UY9)-\$146; Delco Bose AM/FM Stereo Cassette & CD Player(U1G)-\$972; Security Pkg(V4R)-\$480; Tires P225/60R16(QNY)-\$76

### 1992 FLEETWOOD FWD V8 cyl 4.9 liter, SPFI Gas Engine(L26)

Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; SAE H.P. 200@4100; Torque 275@3000; P.D. 300 cu.in., 4.9 liter

Auto. Trans. 4-speed w/overdrive

6-PS 2-dr Coupe	6CD47	110.8"	203.3"	3566	41.93	n/a	37,185
6-PS 4-dr Coupe Touring	YP5	121.5"	224.3"	3642	41.93	n/a	37,185

Options Fleetwood: Calif. Emissions System(NB2)-\$100; Paint (Firemist-YL2)-\$190; Leather Interior(YL1)-\$570; Custom Seating Pkg only(V4H)-\$425; Astro Roof(CF5)-\$1550; Delco Bose AM/FM Stereo Cassette Player(UU8)-\$576; Delco Bose AM/FM Stereo CD Player(U1B)-\$872; Security Pkg(V4R)-\$295; Gold Pkg(B94)-\$395; Cold Weather Pkg(V10)-\$369

### 1992 DEVILLE FWD V8 cyl 4.9 liter, SPFI Gas Engine(L26)

Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; SAE H.P. 200@4100; Torque 275@3000; P.D. 300 cu.in., 4.9 liter

Auto. Trans. 4-speed w/overdrive

5-PS 2-dr Coupe Deville	6CD47	110.8"	203.3"	3519	41.93	n/a	32,565
6-PS 4-dr Sedan DeVille	6CD69	113.8"	206.3"	3591	41.93	n/a	32,565
6-PS 4-dr Sedan DeVille Touring	n/a	113.8"	206.3"	3627	41.93	n/a	36,015

Options DeVille: Calif. Emissions System(NB2)-\$100; Paint (Firemist-YL2)-\$190; Leather Interior(YL1)-\$570; Formal Cabriolet(CB4)-\$925; Full Vinyl Roof(CB5)-\$925; Full Cabriolet Roof(CF8)-\$1095; Phaeton Roof(T2G)-\$1095; Value Option Pkg(1SB)-\$356; Value Option Pkg(1SC)-\$803; Security Pkg(V4R)-\$295; Gold Pkg(B94)-\$395; Cold Weather Pkg(V10)-\$369; Astro Roof(CF5)-\$1550; Computer Command Ride Sytem(FX3)-\$380; H/Duty Livery Pkg(EF7)-\$1000; Locking Wire Wheel Covers(N91)-\$235; Cast Aluminum Wheels(PH3)-\$235; Coachbuilder Pkg(R1P)-\$1000; Delco Bose AM/FM Stereo Cassette Player(UU8)-\$576; Delco Bose AM/FM Stereo CD Player(U1B)-\$872

### 1993 DEVILLE SERIES V8 cyl 4.9 liter, SPFI Gas Engine(L26)

Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; P.D. 300 cu.in., 4.9 liter(L26)

Auto. Trans. 4-speed w/overdrive

6-PS 2-door Coupe J	6CD47	110.8"	203.3"	3424	41.93	33,915	34,515
6-PS 4-door Sedan B	6CD69	113.8"	206.3"	3510	41.93	32,990	33,590

### 1993 SIXTY SPECIAL SERIES V8 cyl 4.9 liter, SPFI Gas Engine(L26)

Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; P.D. 300 cu.in., 4.9 liter(L26)

Auto. Trans. 4-speed w/overdrive

6-PS 4-door Sedan	6B69	113.8"	206.3"	3554	41.93	37,230	37,830
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### 1993 ELDORADO SERIES V8 cyl 4.9 liter, SPFI Gas Engine(L26)

Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; P.D. 300 cu.in., 4.9 liter(L26)

Auto. Trans. 4-speed w/overdrive

6-PS 2-door Coupe EL57	6EL57	108.0"	202.2"	3516	41.93	33,990	34,590
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### 1993 SEVILLE SERIES V8 cyl 4.9 liter, SPFI Gas Engine(L26)

Bore & Stroke 3.62"x3.62"; Tax H.P. 41.93; P.D. 300 cu.in., 4.9 liter(L26)

Auto. Trans. 4-speed w/overdrive

6-PS 4-door Touring Sedan	6CT69	113.8"	206.3"	3556	41.93	36,310	36,910
6-PS 4-door Seville Sedan M	6KS69	111.0"	202.4"	3596	41.93	36,990	37,590

### 1993 SEVILLE SERIES V8 cyl. 4.6 liter, MPFI Gas Fuel Injection Engine(L37)

Bore & Stroke 3.66"x3.31"; Tax H.P. 42.87; P.D. 279 cu.in., 4.6 liter

Auto. Trans. 4-speed w/overdrive

6-PS 4-door Sedan STS G (price includes \$1770 Federal Gas Gussley Tax)	6KY69	111.0"	202.4"	3807	42.87	41,990	42,590
--	-------	--------	--------	------	-------	--------	--------

### 1993 ALLANTE SERIES V8 cyl. 4.6 liter, MPFI Gas Fuel Injection Engine(L37)

Bore & Stroke 3.66"x3.31"; Tax H.P. 42.87; P.D. 279 cu.in., 4.6 liter

Auto. Trans. 4-speed w/overdrive

2-PS 2-door Convertible F (price includes \$1770 Federal Gas Gussley Tax)	6VS67	99.4"	178.7"	3664	42.87	61,675	62,275
--	-------	-------	--------	------	-------	--------	--------

Options Allante: Calif. Emission-\$100; Instrument Cluster-\$495; Paint & Colors-\$700

## CODES FOR OBJECT CONTACTED

(99) **Unknown event or object**

[illegible]

## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>12</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

## Second Highest Delta "V"

12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_ 15. \_\_\_\_\_ 16. \_\_\_\_\_ 17. \_\_\_\_\_ 18. \_\_\_\_\_ 19. \_\_\_\_\_

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. L 21. C<sub>1</sub> C<sub>2</sub> C<sub>3</sub> C<sub>4</sub> C<sub>5</sub> C<sub>6</sub> 22. ± D

178 052 047 042 030 023 013 + 0029

## Second Highest Delta "V"

23. L 24. C<sub>1</sub> C<sub>2</sub> C<sub>3</sub> C<sub>4</sub> C<sub>5</sub> C<sub>6</sub> 25. ± D

## 26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

178

## 27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

120

## 28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

289

## 29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

153



**FUEL SYSTEM**

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

0

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

0

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

**FIRE OCCURRENCE**

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

0

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

0

- (9) Unknown

35. Location of Fuel Tank-1 Filler Cap

2

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle)  
on left side plane  
(3) Aft of center of the rear wheels (rear axle)  
on right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear  
axle) on left side plane  
(7) Over the center of the rear wheels (rear  
axle) on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

1

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

4

40. Location of Fuel Tank-2

0

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

0

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

43. Leakage Location of Fuel System-1 144. Leakage Location of Fuel System-2 0

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1 0146. Fuel Type-2 00*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



# INTERIOR VEHICLE FORM

BEST AVAILABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9623  
3. Vehicle Number 02

## INTEGRITY

4. Passenger Compartment Integrity 00  
(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

## Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 \* 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

- (0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2  
20. BL 2 21. Roof 0 22. Other 2

- (0) No glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted (original)
- (4) AS-2 - Tempered-with after market tint
- (5) AS-3 - Tempered-tinted (with additional after market tint)
- (6) AS-14 - Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2  
28. BL 1 29. Roof 0 30. Other 1

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

31. WS 2 32. LF 1 33. RF 1 34. LR 1 35. RR 1  
36. BL 1 37. Roof 0 38. Other 1

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1  
44. BL 1 45. Roof 0 46. Other 1

- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

**STEERING RIM/SPOKE DEFORMATION**

(All Measurements Are in Centimeters)

COMPARISON VALUE — DAMAGE VALUE = DEFORMATION

—

=

No — DEFORMATION =

—

=

—

=



**OCCUPANT AREA INTRUSION**

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

**INTRUDING COMPONENT***Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

**LOCATION OF INTRUSION**

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

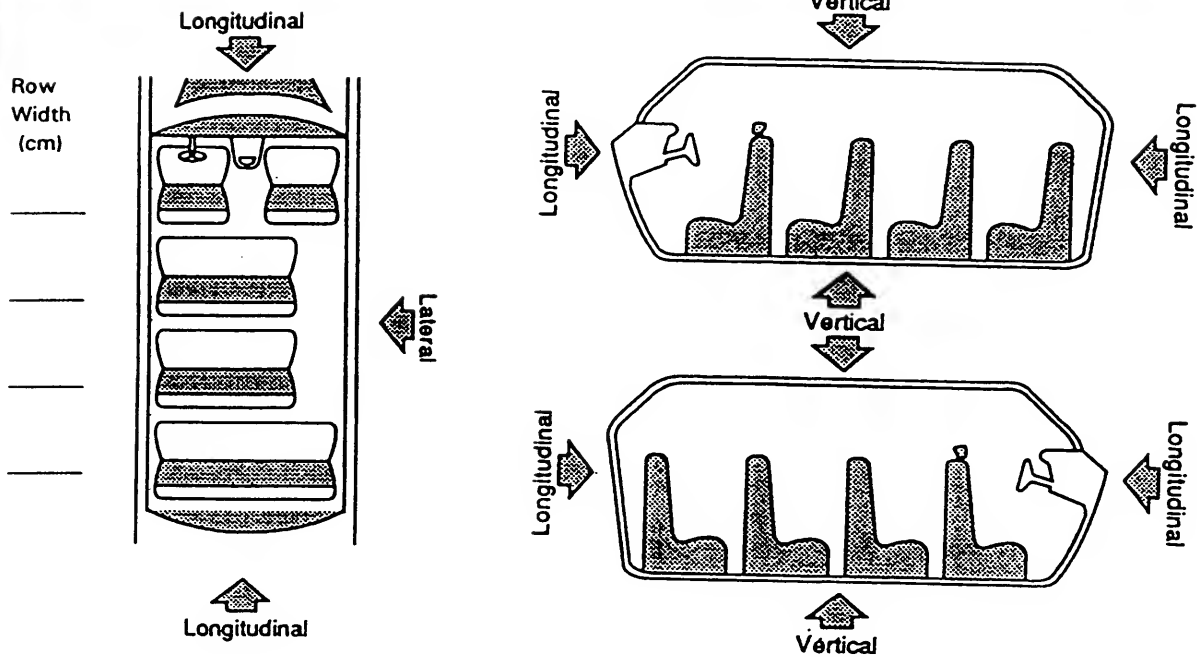
Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

**MAGNITUDE OF INTRUSION**

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

**DOMINANT CRUSH DIRECTION**

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

**INTRUSION WORKSHEET****NOTE: SKETCH INTRUDED AREAS**

LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
		-		=	
		No INTRUSIONS			
		-		=	
		-		=	
		-		=	
		-		=	
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		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	

Document no more than the 15 most severe intrusions

## STEERING COLUMN

## INSTRUMENT PANEL

87. Steering Column Type

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

88. Tilt Steering Column Adjustment

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

90. Steering Rim/Spoke Deformation

- Code actual measured  
 deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation

(00) No steering rim deformation

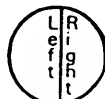
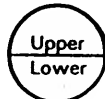
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

92. Odometer Reading

\_\_\_\_\_ kilometers

Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

\_\_\_\_\_ miles X 1.6093 = \_\_\_\_\_ kilometers

Source: Electronic ODOMETER

93. Instrument Panel Damage from Occupant Contact?

- (0) No  
 (1) Yes  
 (9) Unknown

94. Type of Knee Bolster Covering

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed  
 (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_

☐ Additional or relocated switches (specify): \_\_\_\_\_

- ☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown

# FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	0
B-Flaps open at tear points?	2	0
C-Flaps damaged?	2	0
D-Air bag damaged?	01	00
E-Source of air bag damage	01	00
F-Air bag tethered?	1	0
G-Air bag have vent ports?	2	0
H-Other occupant contact air bag?	1	0
I-Occupant wearing eyewear?	2	0

## A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):  
Scuffs
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):

- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):  
2
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

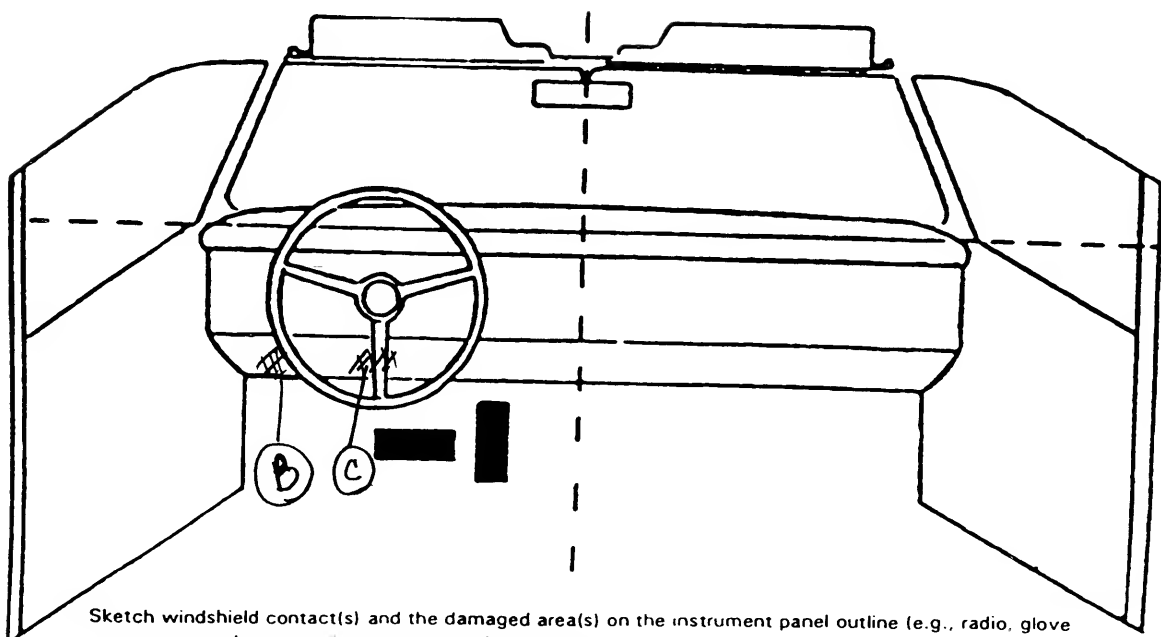
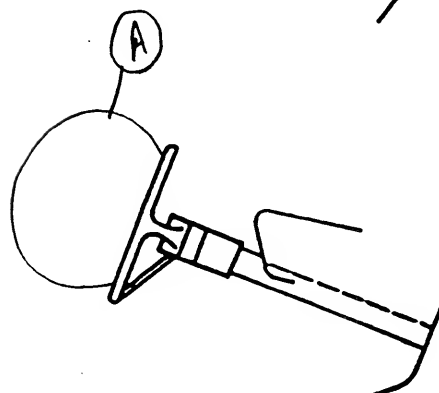
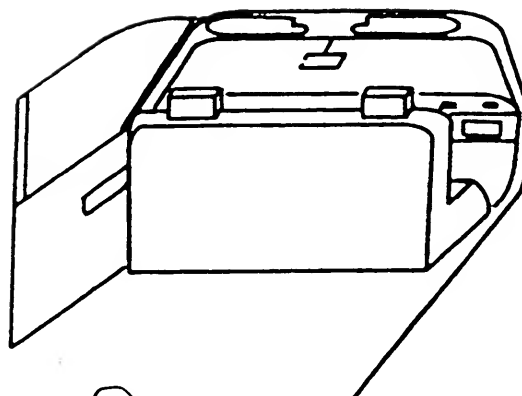
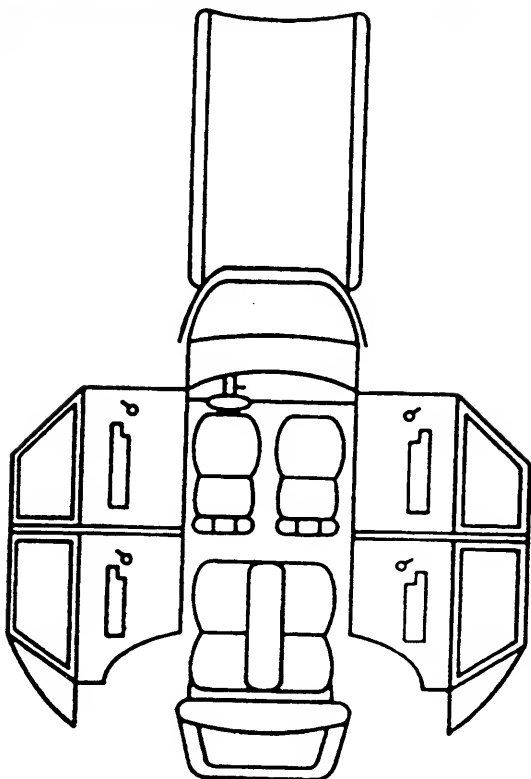
## I-Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown



**VEHICLE INTERIOR SKETCHES**

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	170	1	FACE	SKIN / Blood.	1
B	010	1	(L) Knee	TRANSFER scuff	1
C	010	1	(R) Knee	TRANSFER scuff	1
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify):  
 (195) Other air bag compartment cover (specify):

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

**AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**AIR BAGS**

		Frontal Air Bags--Left Front	Frontal Air Bags--Right Front	Other Air Bag
F I R S T	Availability/Function	/	0	
	Deployment	/	0	
	Failure	/	0	

**Air Bag System Availability/Function**

- (0) Not equipped/not available  
(1) Air bag

**Non-functional**

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled

- (9) Unknown

**Air Bag System Deployment  
(This Occupant Position)**

- (0) Not equipped/not available  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, accident sequence undetermined  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

**Are There Indications of Air Bag System Failure? (This Occupant Position)**

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(9) Unknown

**AUTOMATIC BELTS**

		Left	Right
F I R S T	A-Availability/Function	0	0
	B-Use	0	0
	C-Type	0	0
	D-Proper Use	0	0
	E-Failure Modes	0	0

**A-Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

**B-Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

**C-Automatic (Passive) Belt System Type**

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

**D-Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

- (8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

**E-Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	07	00	00
	D-Proper Use	1	0	0
	E-Failure Modes	1	0	0
	F-Anchorage Adjustment	1	0	1
SECOND	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	00	00	00
	D-Proper Use	0	0	0
	E-Failure Modes	0	0	0
	F-Anchorage Adjustment	1	0	1
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

## A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

- (9) Unknown

## B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): \_\_\_\_\_
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

## D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_
- (8) Other improper use of manual belt system (specify): \_\_\_\_\_

- (9) Unknown

## E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

## F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

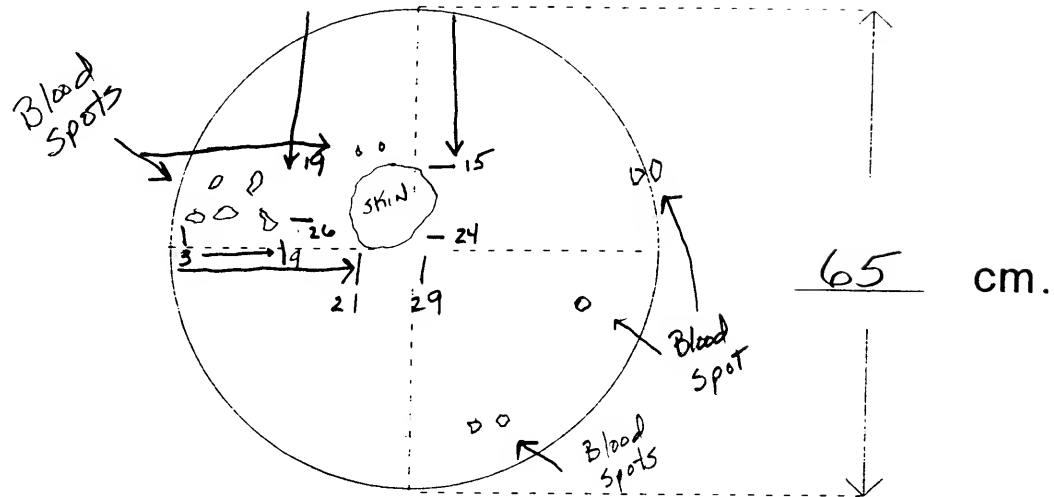
### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

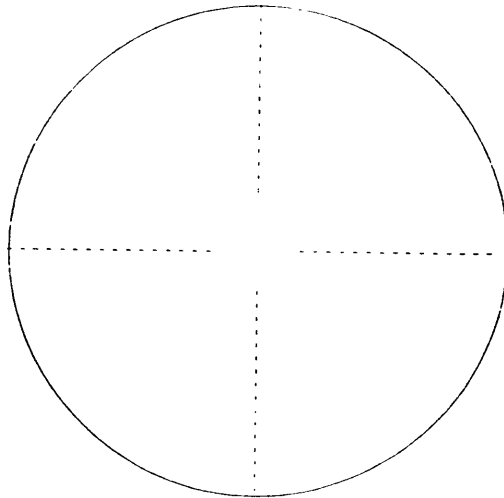


## DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)

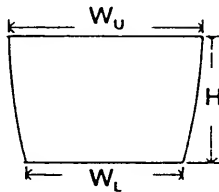


# DRIVER AIR BAG SKETCHES (Cont'd)

## 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

height (H) \_\_\_\_\_



## 4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

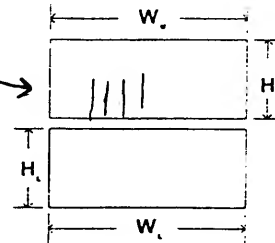
a. Upper Flap

b. Lower Flap

width ( $W_U$ ) 20 width ( $W_L$ ) 19

height ( $H_U$ ) 6 height ( $H_L$ ) 7

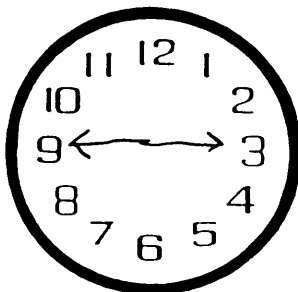
Striation  
scuffs  
to top  
Flap



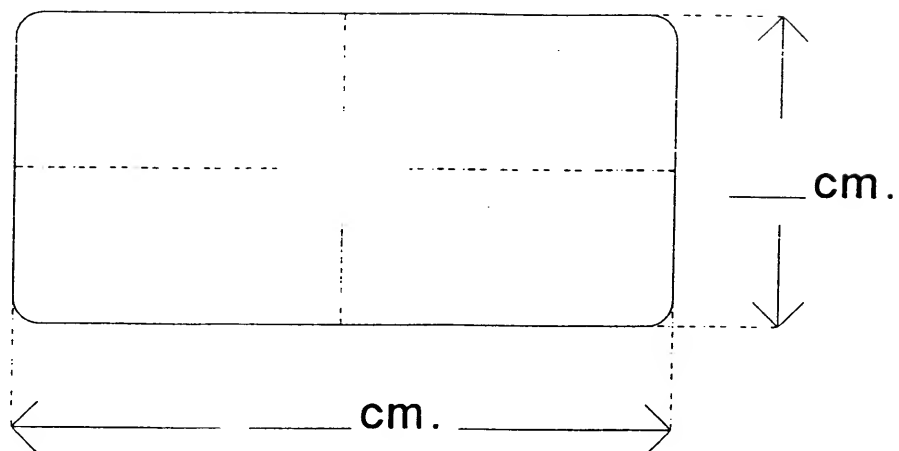
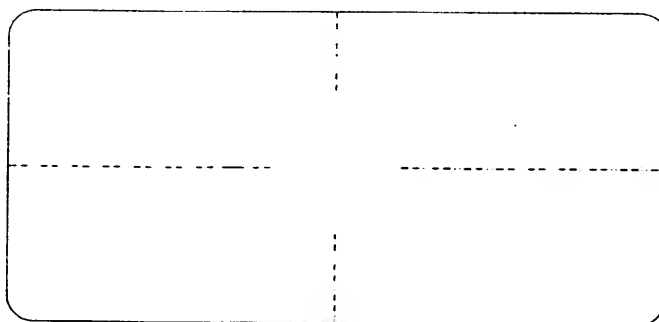
## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

## 7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



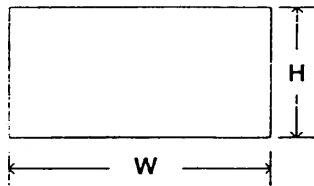
Both  
vent DIAMS  
2cm

**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES****1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)****2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)**

**PASSENGER AIR BAG SKETCHES (Cont'd)****3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)**

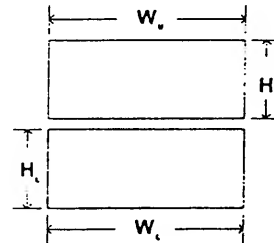
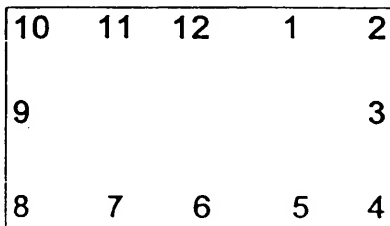
width (W) \_\_\_\_\_

height (H) \_\_\_\_\_

**4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)**

a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_width ( $W_L$ ) \_\_\_\_\_height ( $H_U$ ) \_\_\_\_\_height ( $H_L$ ) \_\_\_\_\_**5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE****6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS****7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS**



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

**"OTHER" AIR BAG SKETCHES (Cont'd)**

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

**HEAD RESTRAINTS/SEAT EVALUATION**

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
<b>FIRST</b>	A-Head Restraint Type/Damage	3	0	3
	B-Seat Type	07	07	07
	C-Seat Orientation	1	1	1
	D-Seat Track Position	3	3	3
	E-Seat Back Incline Pre/Post Impact	14	14	14
	F-Seat Performance	1	1	1
<b>SECOND</b>	A-Head Restraint Type/Damage	1	1	1
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
<b>THIRD</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
<b>OTHER</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation		ABNE				
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): \_\_\_\_\_

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): \_\_\_\_\_

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): \_\_\_\_\_

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): \_\_\_\_\_

- (29) Unknown orientation

- (99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

### 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

### 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

**A-Head Restraint Type/Damage by Occupant at This Occupant Position**

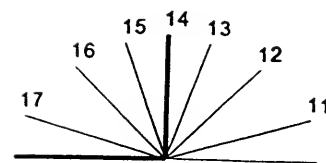
- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**E-Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

*Upright prior to impact*

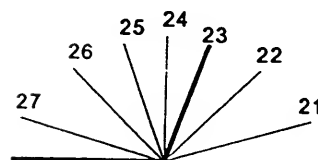
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**B-Seat Type (this Occupant Position)**

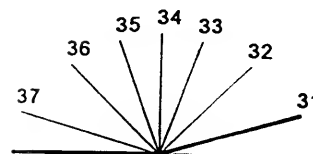
- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): \_\_\_\_\_
- (99) Unknown

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

**C-Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

(99) Unknown

**D-Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

*Adjustable Seat Track*

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**F-Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note on vehicle interior sketch)

**NASS CDS INTERVIEW FORM:**  
**CASE VEHICLE DRIVER**



## INTERVIEW FORM (A)

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9623  
3. Vehicle Number 01

Interviewee(s) Role or Name(s):  
DRIVER & occupant.  
Phone number: \_\_\_\_\_

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

I was SB in center lane this guy cut me off from (R) lane I swerved into (L) hit brakes lost control went across MEDIAN spun around went across 2 lanes undid up stopped in 1st lane then got hit by other lady I don't remember anything past going up other side of MEDIAN.

The other lady should have been able to AVOID our car.

### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

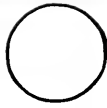
BF PASSENGER

WAS told seatbelt caused babies death. Doctors told my sister this I don't remember anything from accid to 2wks later I hit my head on windshield. -per Police

### SPECIFIC QUESTIONS TO ASK INTERVIEWEE



## ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

## CRASH DATA INFORMATION

IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	<input checked="" type="checkbox"/> Driver <input type="checkbox"/> Other occupant <input type="checkbox"/> Relative/friend
TRAVEL DIRECTION?	<input type="checkbox"/> North <input checked="" type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West (Or where were they coming from or going to?)
LANE?	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other Note: lane 1 is the right curb lane
ROAD CONDITION?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snow <input type="checkbox"/> Slush <input type="checkbox"/> Ice <input type="checkbox"/> Sand, dirt, oil <input type="checkbox"/> Other (specify)
WEATHER CONDITIONS? (Check all that apply)	<input checked="" type="checkbox"/> No adverse conditions <input type="checkbox"/> Rain <input type="checkbox"/> Fog <input type="checkbox"/> Sleet <input type="checkbox"/> Hail <input type="checkbox"/> Snow <input type="checkbox"/> Other (specify)
SIGN OR SIGNAL PRESENT? (check all that apply)	<input type="checkbox"/> Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) <input type="checkbox"/> Stop sign <input type="checkbox"/> Yield sign <input type="checkbox"/> School zone sign <input type="checkbox"/> Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ <input type="checkbox"/> Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: <u>SPEED LIMIT</u> <input type="checkbox"/> Miscellaneous control (including railroad controls) specify: _____ <input type="checkbox"/> None <input type="checkbox"/> Unknown
WAS THE CONTROL FUNCTIONING PROPERLY?	<input type="checkbox"/> No traffic control device present <input type="checkbox"/> Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: _____ <input checked="" type="checkbox"/> Functioning properly <input type="checkbox"/> Unknown <u>60</u>
SPEED BEFORE THE IMPACT? (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input checked="" type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input checked="" type="checkbox"/> 61-70 <input type="checkbox"/> Unknown
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	<input checked="" type="checkbox"/> Go straight <input type="checkbox"/> Stopped <input type="checkbox"/> Turn left <input type="checkbox"/> Turn right <input type="checkbox"/> Slow down <input type="checkbox"/> Accelerate <input type="checkbox"/> Back up <input type="checkbox"/> Change lanes to right <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Change lanes to left
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes (describe)
AVOIDANCE ACTIONS?	<input type="checkbox"/> None <input checked="" type="checkbox"/> Braking with lock-up <input type="checkbox"/> Accelerating <input type="checkbox"/> Unknown <input type="checkbox"/> Braking without lock-up <input type="checkbox"/> Steering left <input type="checkbox"/> Other- specify: <input type="checkbox"/> Releasing brakes <input type="checkbox"/> Steering right
LOCATION OF VEHICLE AT TIME OF IMPACT?	<input type="checkbox"/> Original travel lane <input type="checkbox"/> Different travel lane <input type="checkbox"/> In intersection <input type="checkbox"/> Off roadway to right <input type="checkbox"/> Off roadway to left <input type="checkbox"/> Other (specify): <u>in oncoming lanes.</u>
SPEED AT THE TIME OF IMPACT? (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input checked="" type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input type="checkbox"/> Unknown
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	

## ROLLOVER DATA

**[ ] YES - - ASK THE FOLLOWING QUESTIONS**

## ROLLOVER BEGAN

## ROLLOVER CAUSE?

**DIRECTION OF VEHICLE ROLL?**

NUMBER OF TURNS

## PLANE IN CONTACT WITH GROUND AT FINAL REST?

## FIRE DATA

**[ ] YES - - ASK THE FOLLOWING QUESTIONS**

**FIRE STARTED, OR SMOKE  
WAS FIRST SEEN ...**

## FIRE START WITH THE ELECTRICAL SYSTEM?

☐ No                      ☐ Unknown

☐ Yes (specify):

## FIRE START WITH THE FUEL SYSTEM?

☐ No                      ☐ Unknown

( ) Yes - - specify Which part of the fuel system may have been involved?

☐ Fuel tank  
☐ Fuel lines  
☐ Engine compartment (specify component if known)  
☐ Unknown

**Describe any additional rollover or fire information here:**

### ADDITIONAL VEHICLE INFORMATION

<b>YEAR, MAKE AND MODEL?</b>	Year: 19 ____ Make: _____ Model: _____
<b>PREVIOUS OR POST-CRASH DAMAGE?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - describe: <i>small Dent on REAR Quarter Panel.</i> <input type="checkbox"/> Unknown
<b>DOORS OR HATCH OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <i>HAD to cut both doors open</i> <input type="checkbox"/> Yes <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> HATCH <input type="checkbox"/> OTHER _____ <input type="checkbox"/> Unknown
<b>WINDOWS BREAK DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No                      Check all that apply <input type="checkbox"/> Yes <input type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other <input type="checkbox"/> Unknown
<b>WINDOW PRECRASH STATUS</b>	<i>All closed.</i> <input type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other  "O" = open                      "C" = Closed "P" = partially open        "U" = Unknown
<b>GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe: <input checked="" type="checkbox"/> Unknown
<b>CARGO IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - describe:  Approximate weight - _____ pounds
<b>VEHICLE MILEAGE</b>	_____ miles <input checked="" type="checkbox"/> Unknown
<b>IF VEHICLE HAS NOT BEEN INSPECTED</b>	Current location of the vehicle: _____ _____ Contact person: _____
Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location:	



**SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION**

Do you recall the type of development in the area of the crash?	<input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Undeveloped <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Agricultural <input type="checkbox"/> School
What were the weather conditions at the time of the crash?	<input checked="" type="checkbox"/> Clear (no clouds, no precipitation) <input type="checkbox"/> Cloudy (partially cloudy, no precipitation) <input type="checkbox"/> Overcast (full cloud cover, no precipitation) <input type="checkbox"/> Precipitating <input type="checkbox"/> Unknown	
What was the type of precipitation?	<input checked="" type="checkbox"/> No precipitation <input type="checkbox"/> Unknown <input type="checkbox"/> Raining <input type="checkbox"/> Freezing rain <input type="checkbox"/> Sleet <input type="checkbox"/> Snowing <input type="checkbox"/> Hailing	
What was the condition of the road surface?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snowy, slushy <input type="checkbox"/> Icy <input type="checkbox"/> Other (e.g., sand, dirt, oil on surface, etc.) <input type="checkbox"/> Unknown	
How would you describe the amount of traffic at the time of the crash?	<input type="checkbox"/> Heavy <input type="checkbox"/> Light	<input checked="" type="checkbox"/> Moderate <input type="checkbox"/> No other traffic present
What is your occupation?	<input type="checkbox"/> Professional <input type="checkbox"/> Technical <input type="checkbox"/> Government official <input type="checkbox"/> Management <input type="checkbox"/> Proprietors <input type="checkbox"/> Sales <input type="checkbox"/> Clerical <input type="checkbox"/> Craftsman and foreman <input type="checkbox"/> Service worker <input checked="" type="checkbox"/> Student <input type="checkbox"/> Farmers and farm-managers <input type="checkbox"/> Farm labors and foreman <input type="checkbox"/> Private household worker <input type="checkbox"/> Housewife <input type="checkbox"/> Other: _____	
How long have you driven this vehicle?	Years: _____	Months: <u>4 times over 2 months</u>
How many miles do you think that you have driven it in the last 12-month period?	Miles: <u>UNK</u>	
How often do you drive this particular roadway?	<input type="checkbox"/> Daily <input type="checkbox"/> Twice weekly <input type="checkbox"/> Once weekly <input type="checkbox"/> Twice monthly <input type="checkbox"/> Once monthly <input type="checkbox"/> Very infrequently <input checked="" type="checkbox"/> First time on road	
Where were you coming from just prior to the crash?	<input type="checkbox"/> Home <input type="checkbox"/> School <input type="checkbox"/> Social/recreational <input type="checkbox"/> Personal business	<input type="checkbox"/> Work <input checked="" type="checkbox"/> Shopping <input type="checkbox"/> Restaurant <input type="checkbox"/> Other: _____
Where were you intending to go when the crash occurred?	<input checked="" type="checkbox"/> Home <input type="checkbox"/> School <input type="checkbox"/> Social/recreational <input type="checkbox"/> Personal business	<input type="checkbox"/> Work <input type="checkbox"/> Shopping <input type="checkbox"/> Restaurant <input type="checkbox"/> Other: _____

## OCCUPANT DATA QUESTIONS

HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>   </u>
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)    Second Middle (2M) Front Right (FR)      Second Right (2R)  Third Left (3L)      Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	FRONT LEFT	FR	
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <b>CIRCLE DRIVER'S RACE:</b> (White)    Black    American Indian    157.5 Eskimo or Aleut    Asian or Pacific Islander    57.2  Other (specify): Unknown	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input checked="" type="checkbox"/> F - Pregnant - # of months <u>8</u> <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>5'2"</u> WEIGHT: <u>126</u> AGE: <u>19</u>  DRIVER OF HISPANIC ORIGIN? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input checked="" type="checkbox"/> F - Pregnant - # of months <u>8</u> <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>5'3"</u> WEIGHT: <u>147</u> AGE: <u>20</u>  <del>DRIVER OF HISPANIC ORIGIN?</del>	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months <u>   </u> <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>   </u> WEIGHT: <u>   </u> AGE: <u>   </u>  <del>DRIVER OF HISPANIC ORIGIN?</del>
<b>OCCUPANT POSTURE</b>  A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <b>FEET</b> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <b>HANDS / ARMS</b> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed   (F) both on bottom towards side	Indicate all letters that apply and further describe as needed   Don't Remember	Indicate all letters that apply and further describe as needed

OCCUPANT DATA CONTINUED ON NEXT PAGE

**OCCUPANT DATA QUESTIONS (continued)**

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>   </u>																																																
<b>BACK UP AGAINST THE SEAT BACK?</b>	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT TRACK, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?</b>	<input type="checkbox"/> Not adjustable <input checked="" type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input checked="" type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT BACK, IF "YES" WHERE WAS THE BACK PRE AND POST IMPACT</b>	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input checked="" type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input checked="" type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input checked="" type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input checked="" type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input checked="" type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input checked="" type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
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<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown																																																		

**TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT**

<input checked="" type="checkbox"/> Not adjustable	<input type="checkbox"/> Full up	<input type="checkbox"/> Between full up and center
<input type="checkbox"/> Center	<input type="checkbox"/> Between center and full down	
<input type="checkbox"/> Full down	<input type="checkbox"/> Unknown	

**TELESCOPING STEERING COLUMN PRIOR TO IMPACT**

<input checked="" type="checkbox"/> Not adjustable	<input type="checkbox"/> Full back	<input type="checkbox"/> Between full back and midpoint
<input type="checkbox"/> Midpoint	<input type="checkbox"/> Between midpoint and full forward	
<input type="checkbox"/> Full forward	<input type="checkbox"/> Unknown	

**Did this vehicle have a cellular phone in it during the crash?**

☒ No

☐ Yes - describe type: \_\_\_\_\_  
(e.g., portable, mounted in vehicle, flip phone, etc.)

☐ Unknown

**(Note to researcher: try to determine any driver distractions without implying fault)**

**Was the driver doing any of the following? (check all that apply - and specify)**

- ☐ Talking to or listening to another occupant (specify):
- ☐ Was there a moving object in vehicle (specify):
- ☐ Talking or listening on a cellular phone (specify):
- ☐ Dialing a cellular phone (specify):
- ☐ Adjusting climate control (specify):
- ☐ Adjusting radio, CD or cassette player (specify):
- ☐ Using other device or object in vehicle (specify):
- ☐ Sleepy / asleep (specify):
- ☐ Distracted by outside person, object, or event (specify):
- ☐ Eating or drinking (specify):
- ☐ Smoking related (specify):
- ☐ Other (specify):
- ☐ Unknown

## RESTRAINT INFORMATION

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>   </u>
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> (i.e., 2-point automatic belt)	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
* IF "YES", WERE THEY WORKING PROPERLY?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)
<b>ARE ANY BELTS ATTACHED TO THE DOOR?</b> (i.e., 3-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
* IF "YES", DOES IT CROSS:	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown

**SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN**

<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input checked="" type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input checked="" type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown

Describe any breaks, tears, or failures to any of the seat belts:

post CRASH  
 HAD to TAKE top belt off because it was  
 too tight on me.



**EJECTION, ENTRAPMENT, MOBILITY INFORMATION**

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>   </u>
<b>ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
<b>ANYONE PINNED IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment
<b>HOW DID OCCUPANT(S) EXIT THE VEHICLE?</b>	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input checked="" type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input checked="" type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown
Further describe any ejection, entrapment, or mobility information here:			

**AIR BAG INFORMATION****WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?**☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # ____	"OTHER" AIR BAG SPECIFY: _____ OCCUPANT # ____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:

Describe any additional information here:

**CHILD SAFETY SEAT INFORMATION**

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
MAKE AND MODEL OF THE SAFETY SEAT?			
TYPE OF SEAT?		<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
DIRECTION FACING PRIOR TO THE CRASH?		<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:

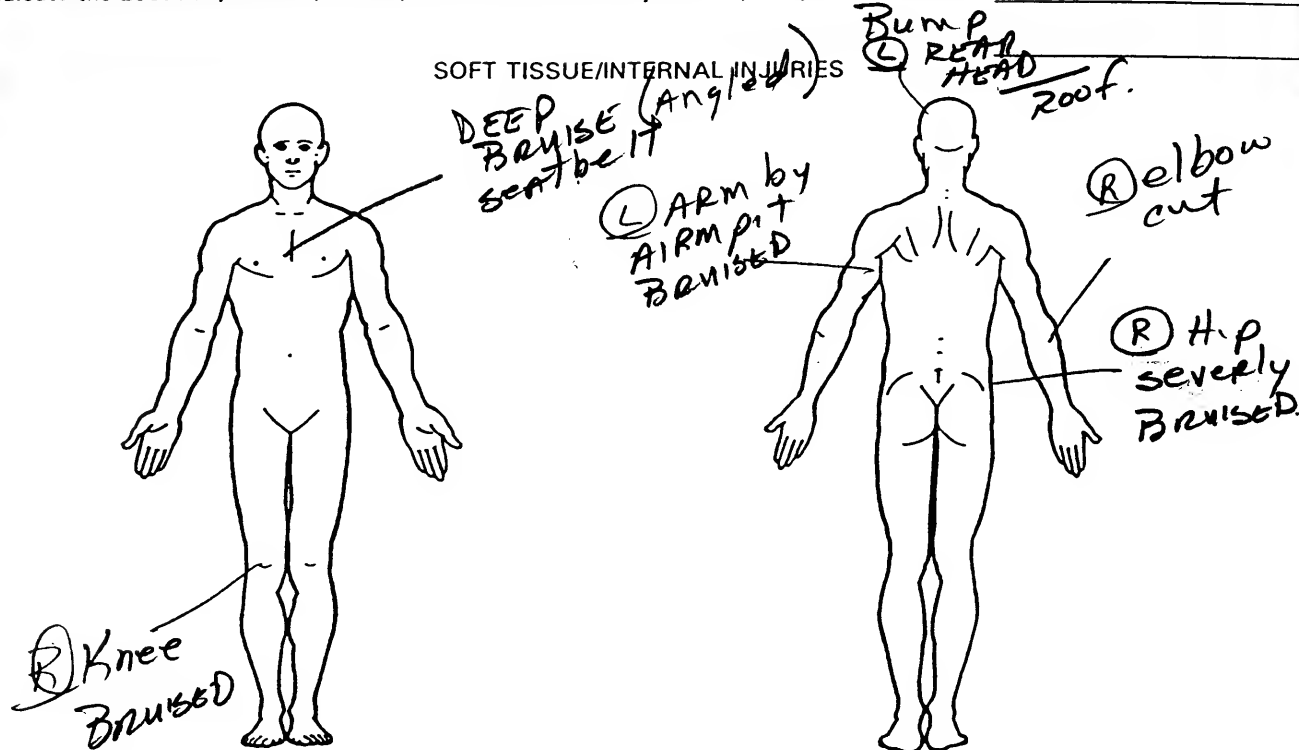
## INJURY INFORMATION

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>    </u>
<b>WERE YOU INJURED?</b> <p>▶ If "YES" go to manikin page and record injuries in detail</p> <p>▶ If "NO" ask next questions</p>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> <p>(If any injuries are checked, go to the manikin page and record location, lesion, and source)</p>	<input checked="" type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input checked="" type="checkbox"/> Bruises <input checked="" type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input checked="" type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input checked="" type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input checked="" type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input checked="" type="checkbox"/> Head, skull, brain <input checked="" type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> <p>(check all that apply)</p>	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <u>2 nights</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <u>8 nights</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>			
<b>RECEIVE ANY FOLLOW-UP TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: <u>None</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <u>3 school</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input checked="" type="checkbox"/> Yes - # of days <u>still off</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown
<b>IF REQUIRED:</b> <b>WILL YOU SIGN A MEDICAL RELEASE?</b> <p>* If not an in-person interview, make appointment to have release signed</p>	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____

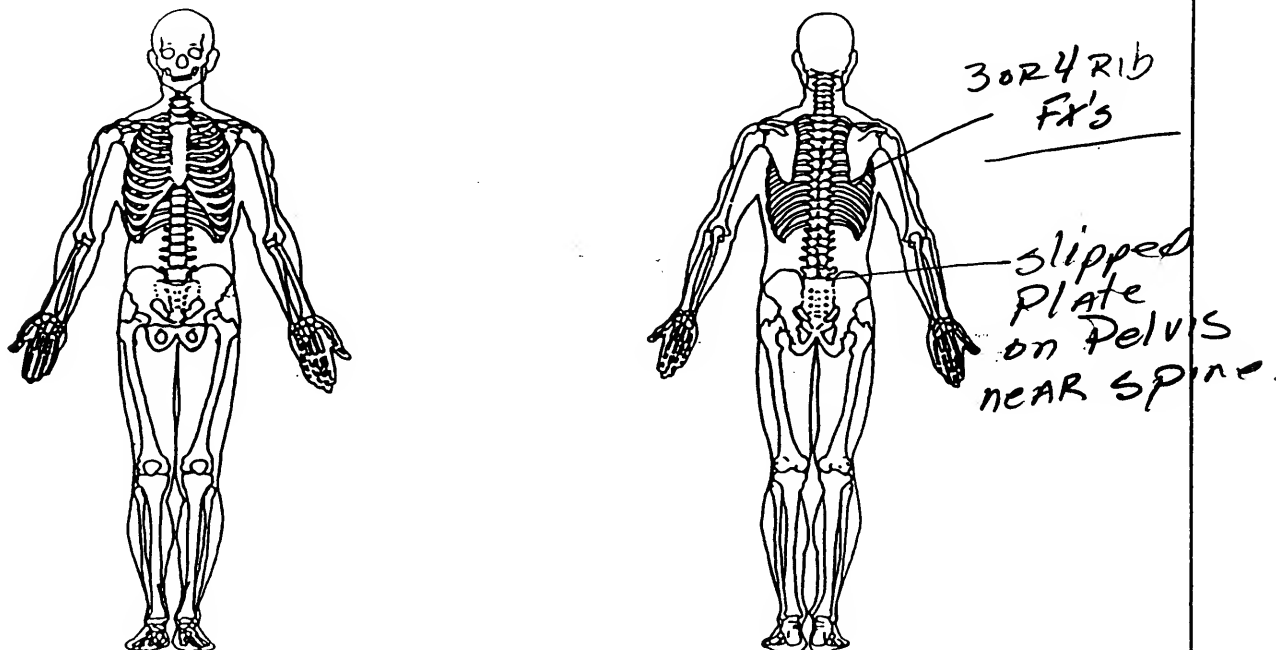
PSU Number 10 Case Number—Stratum 9623 Vehicle Number 01 Occupant Number 01**INJURY DATA FROM INTERVIEWEE(S)**

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): \_\_\_\_\_

## SOFT TISSUE/INTERNAL INJURIES



## SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

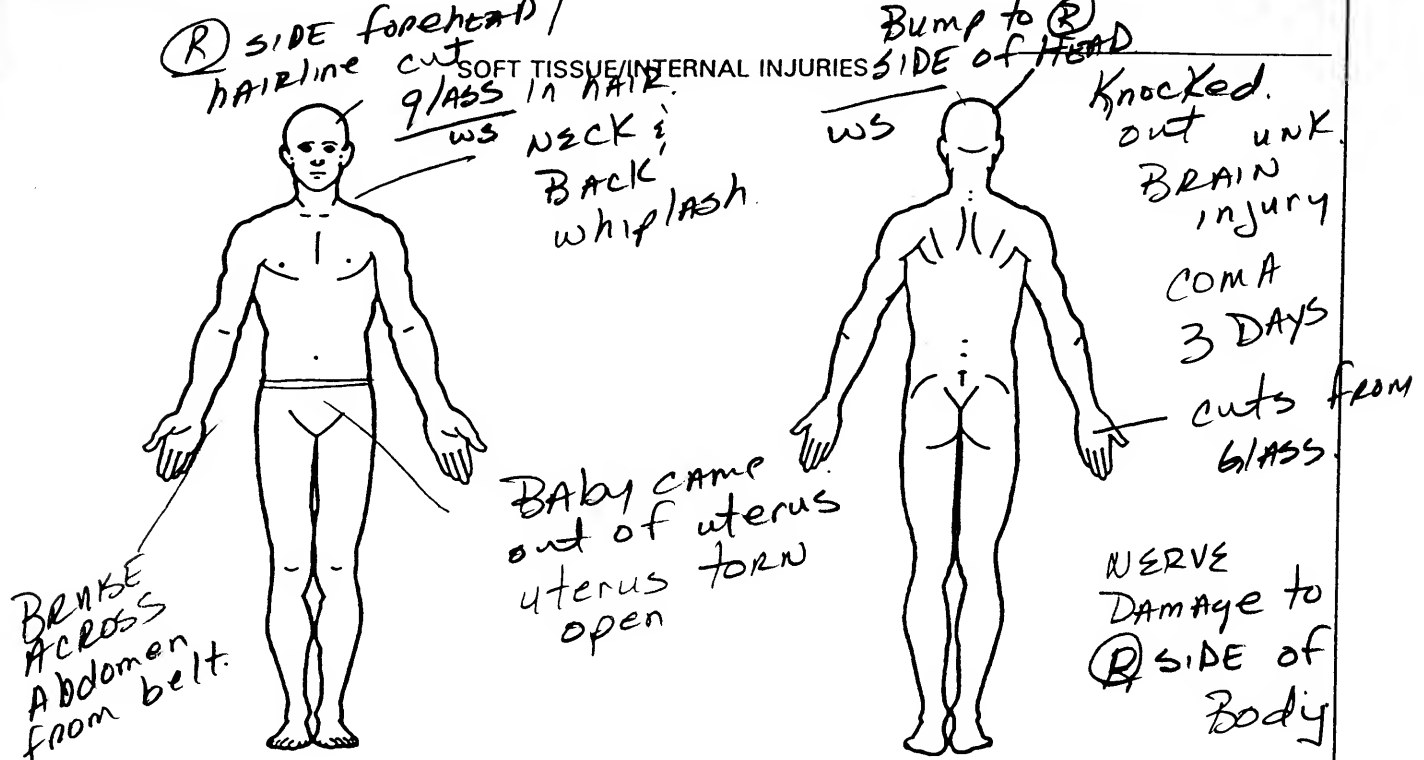


PSU Number 10Case Number—Stratum 9623Vehicle Number 01Occupant Number 02

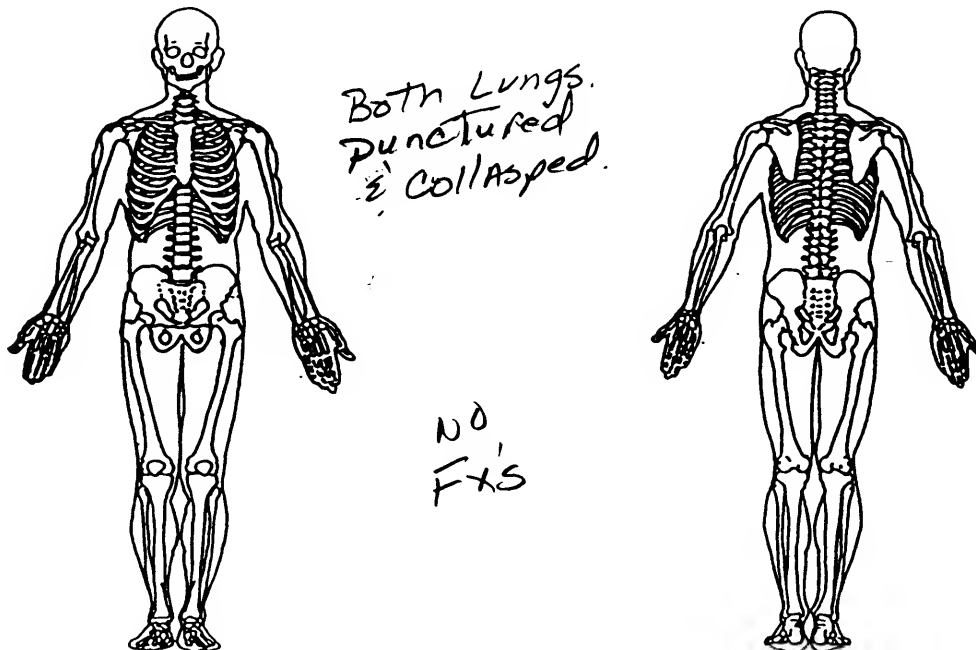
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s):

THIS occupant



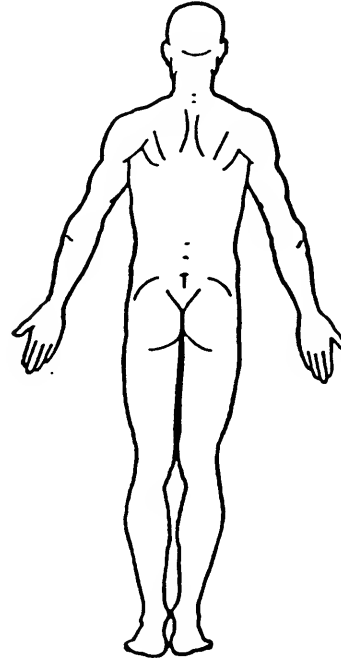
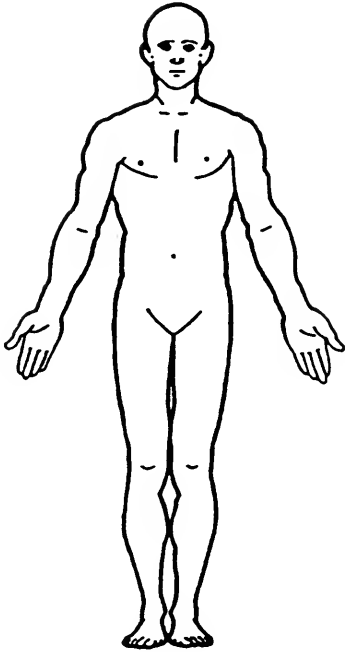
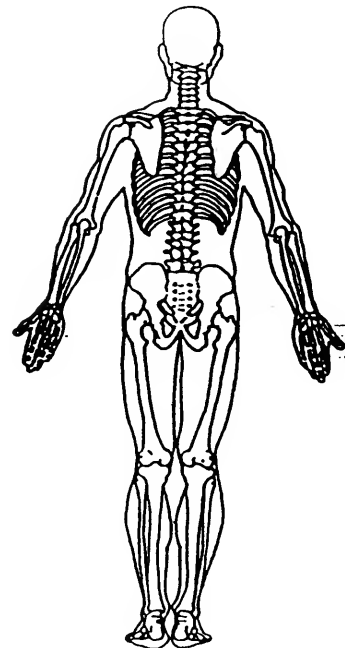
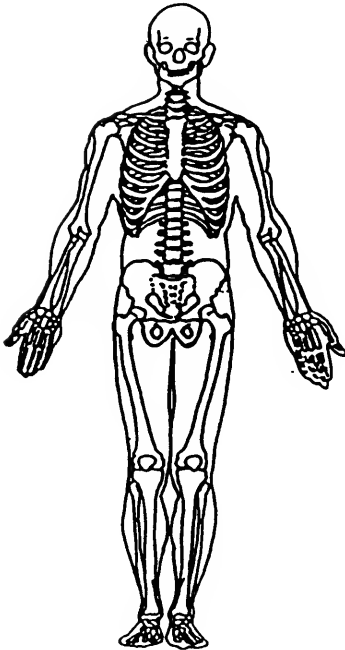
## SKELETAL INJURIES



PSU Number 10Case Number—Stratum 96

Vehicle Number \_\_\_\_\_

Occupant Number \_\_\_\_\_

**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): \_\_\_\_\_**SOFT TISSUE/INTERNAL INJURIES****SKELETAL INJURIES**

The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

**NASS CDS INTERVIEW FORM:**  
**VEHICLE #2 DRIVER**



INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

Interviewee(s) Role or Name(s): \_\_\_\_\_

2. Case Number - Stratum 96-23

DRIVER

3. Vehicle Number 02

Phone number: \_\_\_\_\_

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

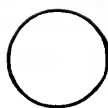
**DRIVER'S DESCRIPTION OF ACCIDENT EVENTS**

I was N/B And other car w/girls  
came across (had lost control). When they  
hit me they were AIRBOAN. I was belted  
bag deployed. It seemed like I had no  
time to react although I skidded 18 feet  
according to police officer

**OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS**

**SPECIFIC QUESTIONS TO ASK INTERVIEWEE**

## ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.



**CRASH DATA INFORMATION****IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:**

<b>SOURCE OF INFORMATION:</b>	<input checked="" type="checkbox"/> Driver <input type="checkbox"/> Other occupant <input type="checkbox"/> Relative/friend
<b>TRAVEL DIRECTION?</b>	<input checked="" type="checkbox"/> North <input type="checkbox"/> South <input type="checkbox"/> East <input type="checkbox"/> West (Or where were they coming from or going to?)
<b>LANE?</b>	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other Note: lane 1 is the right curb lane
<b>ROAD CONDITION?</b>	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snow <input type="checkbox"/> Slush <input type="checkbox"/> Ice <input type="checkbox"/> Sand, dirt, oil <input type="checkbox"/> Other (specify) _____
<b>WEATHER CONDITIONS?</b> (Check all that apply)	<input checked="" type="checkbox"/> No adverse conditions <input type="checkbox"/> Rain <input type="checkbox"/> Fog <input type="checkbox"/> Sleet <input type="checkbox"/> Hail <input type="checkbox"/> Snow <input type="checkbox"/> Other (specify) _____
<b>SIGN OR SIGNAL PRESENT?</b> (check all that apply)	<input type="checkbox"/> Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) <input type="checkbox"/> Stop sign <input type="checkbox"/> Yield sign <input type="checkbox"/> School zone sign <input type="checkbox"/> Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ <input type="checkbox"/> Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: _____ <input type="checkbox"/> Miscellaneous control (including railroad controls) specify: _____ <input checked="" type="checkbox"/> None <input type="checkbox"/> Unknown
<b>WAS THE CONTROL FUNCTIONING PROPERLY?</b>	<input checked="" type="checkbox"/> No traffic control device present <input type="checkbox"/> Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: _____ <input type="checkbox"/> Functioning properly <input type="checkbox"/> Unknown
<b>SPEED BEFORE THE IMPACT?</b> (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input checked="" type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input type="checkbox"/> Unknown
<b>BEFORE IMPACT, INTENDING TO ... ?</b> (check all that apply)	<input checked="" type="checkbox"/> Go straight <input type="checkbox"/> Stopped <input type="checkbox"/> Turn left <input type="checkbox"/> Turn right <input type="checkbox"/> Slow down <input type="checkbox"/> Accelerate <input type="checkbox"/> Back up <input type="checkbox"/> Change lanes to right <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Change lanes to left
<b>CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes (describe) _____
<b>AVOIDANCE ACTIONS?</b>	<input type="checkbox"/> None <input checked="" type="checkbox"/> Braking with lock-up <input type="checkbox"/> Accelerating <input type="checkbox"/> Unknown <input type="checkbox"/> Braking without lock-up <input type="checkbox"/> Steering left <input type="checkbox"/> Other- specify: _____ <input type="checkbox"/> Releasing brakes <input type="checkbox"/> Steering right
<b>LOCATION OF VEHICLE AT TIME OF IMPACT?</b>	<input checked="" type="checkbox"/> Original travel lane <input type="checkbox"/> Different travel lane <input type="checkbox"/> In intersection <input type="checkbox"/> Off roadway to right <input type="checkbox"/> Off roadway to left <input type="checkbox"/> Other (specify): _____
<b>SPEED AT THE TIME OF IMPACT?</b> (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input checked="" type="checkbox"/> Unknown
<b>DESCRIBE ALL THE IMPACTS</b> to the vehicle and how this vehicle moved to its stopped position, after the collision?	only 1 impact

**VEHICLE INFORMATION****ROLLOVER DATA**

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

☐ YES -- ASK THE FOLLOWING QUESTIONS☒ NO -- SKIP TO "FIRE DATA" BELOW  
☐ UNKNOWN -- SKIP TO "FIRE DATA" BELOW

ROLLOVER BEGAN	<input type="checkbox"/> On roadway <input type="checkbox"/> On shoulder <input type="checkbox"/> On roadside or median <input type="checkbox"/> Unknown
ROLLOVER CAUSE?	<input type="checkbox"/> Other vehicle (specify vehicle number) _____ <input type="checkbox"/> Contact to object (specify): _____ <input type="checkbox"/> Other cause (specify): _____ <input type="checkbox"/> Unknown
DIRECTION OF VEHICLE ROLL?	<input type="checkbox"/> Toward the right (passenger side) <input type="checkbox"/> Toward the left (driver side) <input type="checkbox"/> End-over-end <input type="checkbox"/> Unknown
NUMBER OF TURNS	_____ Number of QUARTER TURNS <input type="checkbox"/> Unknown _____ Number of COMPLETE TURNS
PLANE IN CONTACT WITH GROUND AT FINAL REST?	<input type="checkbox"/> Left side <input type="checkbox"/> Top <input type="checkbox"/> Right side <input type="checkbox"/> Wheels <input type="checkbox"/> Unknown

**FIRE DATA**

DID THIS VEHICLE EXPERIENCE A FIRE?

☐ YES -- ASK THE FOLLOWING QUESTIONS☒ NO -- SKIP THIS SECTION  
☐ UNKNOWN -- SKIP THIS SECTION

FIRE STARTED, OR SMOKE WAS FIRST SEEN ...	<input type="checkbox"/> Under the hood <input type="checkbox"/> In the trunk/cargo area <input type="checkbox"/> Behind the instrument panel <input type="checkbox"/> Under the vehicle <input type="checkbox"/> In the passenger compartment <input type="checkbox"/> From other involved vehicle <input type="checkbox"/> Unknown
FIRE START WITH THE ELECTRICAL SYSTEM? <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes (specify): _____
FIRE START WITH THE FUEL SYSTEM? <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes -- specify Which part of the fuel system may have been involved? <input type="checkbox"/> Fuel tank <input type="checkbox"/> Fuel lines <input type="checkbox"/> Engine compartment (specify component if known) <input type="checkbox"/> Unknown

Describe any additional rollover or fire information here:

### ADDITIONAL VEHICLE INFORMATION



<b>YEAR, MAKE AND MODEL?</b>	Year: 19 <u>92</u> Make: <u>CADILLAC</u> Model: <u>SEDAN Deville.</u>
<b>PREVIOUS OR POST-CRASH DAMAGE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe:  <input type="checkbox"/> Unknown
<b>DOORS OR HATCH OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> HATCH <input type="checkbox"/> OTHER _____ <input type="checkbox"/> Unknown
<b>WINDOWS BREAK DURING THE CRASH?</b>	<input type="checkbox"/> No                                      Check all that apply <input type="checkbox"/> Yes <input checked="" type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other <input type="checkbox"/> Unknown
<b>WINDOW PRECRASH STATUS</b>	<input checked="" type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other  "O" = open                                      "C" = Closed "P" = partially open                                      "U" = Unknown
<b>GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe:  <input checked="" type="checkbox"/> Unknown
<b>CARGO IN THE VEHICLE?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Yes - describe: <u>Leather overnight bag &amp; some clothes</u>  Approximate weight - <u>10</u> pounds <u>4.5+ Kg</u>
<b>VEHICLE MILEAGE</b>	<u>43,000</u> miles <input type="checkbox"/> Unknown
<b>IF VEHICLE HAS NOT BEEN INSPECTED</b>	Current location of the vehicle: _____  Contact person: _____
Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location:	

**SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION**

Do you recall the type of development in the area of the crash?	<input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Undeveloped <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Agricultural <input type="checkbox"/> School
What were the weather conditions at the time of the crash?	<input type="checkbox"/> Clear (no clouds, no precipitation) <input checked="" type="checkbox"/> Cloudy (partially cloudy, no precipitation) <input type="checkbox"/> Overcast (full cloud cover, no precipitation) <input type="checkbox"/> Precipitating <input type="checkbox"/> Unknown	
What was the type of precipitation?	<input checked="" type="checkbox"/> No precipitation <input type="checkbox"/> Unknown <input type="checkbox"/> Raining <input type="checkbox"/> Freezing rain <input type="checkbox"/> Sleet <input type="checkbox"/> Snowing <input type="checkbox"/> Hailing	
What was the condition of the road surface?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snowy, slushy <input type="checkbox"/> Icy <input type="checkbox"/> Other (e.g., sand, dirt, oil on surface, etc.) <input type="checkbox"/> Unknown	
How would you describe the amount of traffic at the time of the crash?	<input type="checkbox"/> Heavy <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Light <input type="checkbox"/> No other traffic present	
What is your occupation?	<input type="checkbox"/> Professional <input type="checkbox"/> Technical <input type="checkbox"/> Government official <input type="checkbox"/> Management <input type="checkbox"/> Proprietors <input type="checkbox"/> Sales <input type="checkbox"/> Clerical <input type="checkbox"/> Craftsman and foreman <input type="checkbox"/> Service worker <input type="checkbox"/> Student <input type="checkbox"/> Farmers and farm-managers <input type="checkbox"/> Farm labors and foreman <input type="checkbox"/> Private household worker <input type="checkbox"/> Housewife <input checked="" type="checkbox"/> Other: <u>Retired</u>	
How long have you driven this vehicle?	Years: _____ Months: <u>46</u> <u>Since</u> <u>92</u>	
How many miles do you think that you have driven it in the last 12-month period?	Miles: <u>13,000</u>	
How often do you drive this particular roadway?	<input type="checkbox"/> Daily <input checked="" type="checkbox"/> Twice weekly <u>prior</u> <input type="checkbox"/> Once weekly <input type="checkbox"/> Twice monthly <u>to</u> <input type="checkbox"/> Once monthly <input type="checkbox"/> Very infrequently <u>crash.</u> <input type="checkbox"/> First time on road	
Where were you coming from just prior to the crash?	<input type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <u>Vacation</u> <input type="checkbox"/> Shopping <input checked="" type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: _____	
Where were you intending to go when the crash occurred?	<input checked="" type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: _____	

## OCCUPANT DATA QUESTIONS

HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?

	DRIVER	OCCUPANT # _____	OCCUPANT # _____
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)      Second Middle (2M) Front Right (FR)      Second Right (2R)  Third Left (3L)      Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	<b>FRONT LEFT</b>		
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <b>CIRCLE DRIVER'S RACE:</b> 154.9 <u>White</u> Black      American Indian      56.7 Eskimo or Aleut      Asian or Pacific Islander  Other (specify): Unknown	<input type="checkbox"/> M <input checked="" type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months _____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>5'1</u> WEIGHT: <u>125</u> AGE: <u>73</u>  DRIVER OF HISPANIC ORIGIN? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months _____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: _____ WEIGHT: _____ AGE: _____  	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months _____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: _____ WEIGHT: _____ AGE: _____  
<b>OCCUPANT POSTURE</b>  A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <b>FEET</b> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <b>HANDS / ARMS</b> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed  <u>A</u>   <u>F</u>	Indicate all letters that apply and further describe as needed	Indicate all letters that apply and further describe as needed

OCCUPANT DATA CONTINUED ON NEXT PAGE



**OCCUPANT DATA QUESTIONS (continued)**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____																																																
<b>BACK UP AGAINST THE SEAT BACK?</b>	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input type="checkbox"/> Yes <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT TRACK, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?</b>	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input checked="" type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT BACK, IF "YES" WHERE WAS THE BACK PRE AND POST IMPACT</b>	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
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<u>PRE</u>	<u>POST</u>																																																		
<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable																																																		
<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright																																																		
<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined																																																		
<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined																																																		
<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright																																																		
<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward																																																		
<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown																																																		
<b>TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT</b>	<input type="checkbox"/> Not adjustable <input checked="" type="checkbox"/> Center <input type="checkbox"/> Full down	<input type="checkbox"/> Full up <input type="checkbox"/> Between center and full down <input type="checkbox"/> Unknown	<input type="checkbox"/> Between full up and center <input type="checkbox"/> Full down																																																
<b>TELESCOPING STEERING COLUMN PRIOR TO IMPACT</b>	<input checked="" type="checkbox"/> Not adjustable <input type="checkbox"/> Midpoint <input type="checkbox"/> Full forward	<input type="checkbox"/> Full back <input type="checkbox"/> Between midpoint and full forward <input type="checkbox"/> Unknown	<input type="checkbox"/> Between full back and midpoint <input type="checkbox"/> Full forward																																																
<p><b>Did this vehicle have a cellular phone in it during the crash?</b>  <input checked="" type="checkbox"/> No  <input type="checkbox"/> Yes - describe type: _____            (e.g., portable, mounted in vehicle, flip phone, etc.)  <input type="checkbox"/> Unknown</p> <p><b>(Note to researcher: try to determine any driver distractions without implying fault)</b></p>																																																			
<p><b>Was the driver doing any of the following? (check all that apply - and specify)</b></p> <p> <input type="checkbox"/> Talking to or listening to another occupant (specify):  <input type="checkbox"/> Was there a moving object in vehicle (specify):  <input type="checkbox"/> Talking or listening on a cellular phone (specify):  <input type="checkbox"/> Dialing a cellular phone (specify):  <input type="checkbox"/> Adjusting climate control (specify):  <input type="checkbox"/> Adjusting radio, CD or cassette player (specify):  <input type="checkbox"/> Using other device or object in vehicle (specify):  <input type="checkbox"/> Sleepy / asleep (specify):  <input type="checkbox"/> Distracted by outside person, object, or event (specify):  <input type="checkbox"/> Eating or drinking (specify):  <input type="checkbox"/> Smoking related (specify):  <input type="checkbox"/> Other (specify):  <input type="checkbox"/> Unknown         </p>																																																			

**RESTRAINT INFORMATION**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> (i.e., 2 - point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", WERE THEY WORKING PROPERLY?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)
<b>ARE ANY BELTS ATTACHED TO THE DOOR?</b> (i.e., 3 - point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", DOES IT CROSS:</b>	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN</b>			
<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input type="checkbox"/> Low on lap <input checked="" type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input checked="" type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
Describe any breaks, tears, or failures to any of the seat belts:			

**EJECTION, ENTRAPMENT, MOBILITY INFORMATION**

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
<b>ANYONE PINNED IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment
<b>HOW DID OCCUPANT(S) EXIT THE VEHICLE?</b>	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input checked="" type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown

Further describe any ejection, entrapment, or mobility information here:

How did occupant(s) depart the crash scene?

☒ Ambulance  
☐ Police or Tow vehicle  
☐ Relative (specify)  
☐ Friend (specify)  
☐ Other (specify)

☐ Ambulance  
☐ Police or Tow vehicle  
☐ Relative (specify)  
☐ Friend (specify)  
☐ Other (specify)

☐ Ambulance  
☐ Police or Tow vehicle  
☐ Relative (specify)  
☐ Friend (specify)  
☐ Other (specify)

## AIR BAG INFORMATION

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

☒ YES (IF "YES" COMPLETE THIS SECTION)☐ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # ____	"OTHER" AIR BAG SPECIFY: _____ OCCUPANT # ____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input checked="" type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Yes - Specify: <i>Prescription  GLASSES</i>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:

Describe any additional information here:

**CHILD SAFETY SEAT INFORMATION**

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

☐ YES (IF "YES" COMPLETE THIS SECTION)

☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
MAKE AND MODEL OF THE SAFETY SEAT?			
TYPE OF SEAT?		<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
DIRECTION FACING PRIOR TO THE CRASH?		<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:

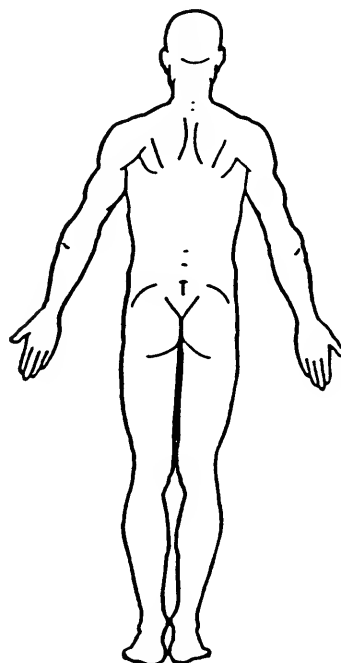
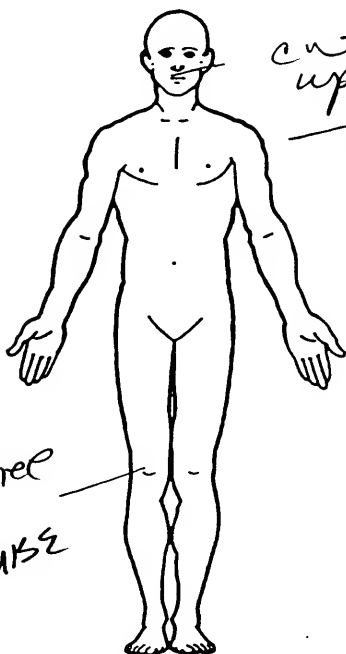


## INJURY INFORMATION

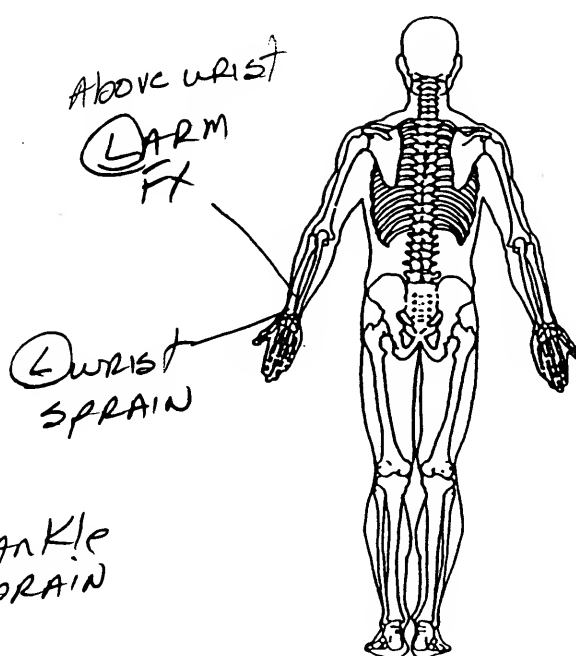
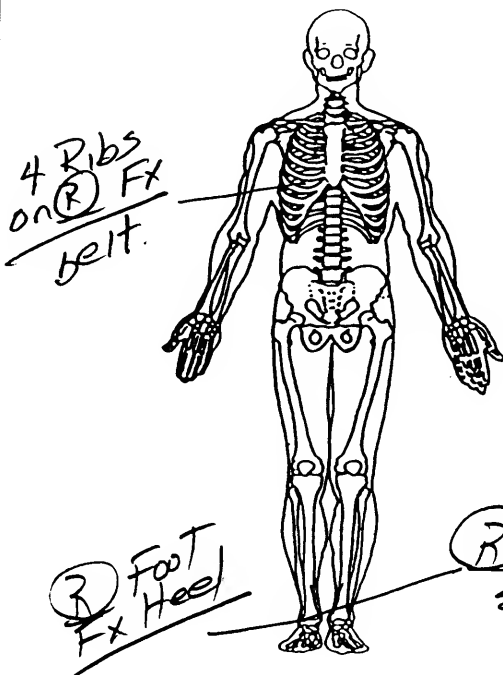
	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>WERE YOU INJURED?</b> ▶ If "YES" go to manikin page and record injuries in detail ▶ If "NO" ask next questions	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> <i>(If any injuries are checked, go to the manikin page and record location, lesion, and source)</i>	<input checked="" type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input checked="" type="checkbox"/> Bruises <input checked="" type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input checked="" type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> <i>(check all that apply)</i>	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - # of days <u>1</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>			
<b>RECEIVE ANY FOLLOW-UP TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - describe any additional injuries diagnosed: <u>Therapy</u> <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed:  <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed:  <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input checked="" type="checkbox"/> No <u>retired</u> <input checked="" type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown
<b>IF REQUIRED:</b> <b>WILL YOU SIGN A MEDICAL RELEASE?</b> * If not an in-person interview, make appointment to have release signed	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____

PSU Number 10Case Number—Stratum 9705Vehicle Number 01Occupant Number 01**INJURY DATA FROM INTERVIEWEE(S)**Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): DRIVER

## SOFT TISSUE/INTERNAL INJURIES



## SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE DRIVER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT ASSESSMENT FORM

BEST AVAILABLE

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9623

3. Vehicle Number

01

4. Occupant Number

01

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

19

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

5

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

157

Code actual height to the nearest  
centimeter.

(999) Unknown

62 inches X 2.54 = 157.48 centimeters

8. Occupant's Weight

057

Code actual weight to the nearest  
kilogram.

(999) Unknown

126 pounds X .4536 = 57.15 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

11

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown

**EJECTION/ENTRAPMENT**12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 2

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown



## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 3

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 03

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 0

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 1

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 1

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 2

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 1

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 1

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

**POLICE REPORTED RESTRAINT USE**28. Police Reported Belt Use 4

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection  
☐ Official injury data  
☐ Driver/occupant interview  
☐ Other (specify):

☐ Unknown if belt used

**AIR BAG SYSTEM FUNCTION**30. Frontal Air Bag System Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 000  
- 000

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 00

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_  
(95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 00
- (00) Not equipped/not available  
(01) Not damaged  
(02) Object worn by occupant, (specify):  
\_\_\_\_\_  
(03) Object carried by occupant, (specify):  
\_\_\_\_\_  
(04) Adaptive/assistive controls, (specify):  
\_\_\_\_\_  
(05) Fire in vehicle  
(06) Thermal burns  
(07) Rescue or emergency efforts  
(88) Other damage source (specify):  
\_\_\_\_\_  
(95) Damaged, unknown source  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown
45. Was The Air Bag Tethered? 0
- (0) Not equipped/not available  
(1) No  
(2) Yes (specify number of tether straps):  
\_\_\_\_\_  
(3) Deployed, unknown if tethered  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown
46. Did The Air Bag Have Vent Ports? 0
- (0) Not equipped/not available  
(1) No  
(2) Yes (specify number of vent ports):  
\_\_\_\_\_  
(3) Deployed, unknown if vent ports present  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0
- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(3) Deployed, unknown if other occupant contact to air bag  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown
48. Was This Occupant Wearing Eye-wear? 0
- (0) Not air bag equipped/air bag not available  
(1) No  
(2) Eyeglasses/sunglasses  
(3) Contact lenses  
(4) Deployed, unknown if eyewear worn  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

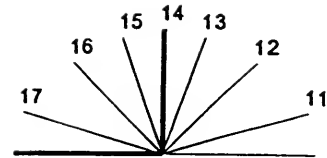
49. Head Restraint Type/Damage by Occupant at This Occupant Position 1
- (0) No head restraints  
(1) Integral—no damage  
(2) Integral—damaged during accident  
(3) Adjustable—no damage  
(4) Adjustable—damaged during accident  
(5) Add-on—no damage  
(6) Add-on—damaged during accident  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown
50. Seat Type (this Occupant Position) 02
- (00) Occupant not seated or no seat  
(01) Bucket  
(02) Bucket with folding back  
(03) Bench  
(04) Bench with separate back cushions  
(05) Bench with folding back(s)  
(06) Split bench with separate back cushions  
(07) Split bench with folding back(s)  
(08) Pedestal (i.e., column supported)  
(09) Box mounted seat (i.e., van type)  
(10) Other seat type (specify):  
\_\_\_\_\_  
(99) Unknown
51. Seat Orientation (this Occupant Position) 1
- (0) Occupant not seated or no seat  
(1) Forward facing seat  
(2) Rear facing seat  
(3) Side facing seat (inward)  
(4) Side facing seat (outward)  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown
52. Seat Track Adjusted Position Prior To Impact 2
- (0) Occupant not seated or no seat  
(1) Non-adjustable seat track
- Adjustable Seat Track*
- (2) Seat at forward most track position  
(3) Seat between forward most and middle track positions  
(4) Seat at middle track position  
(5) Seat between middle and rear most track positions  
(6) Seat at rear most track position  
(9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION** *continued*53. Seat Back Incline Prior and Post Impact 12

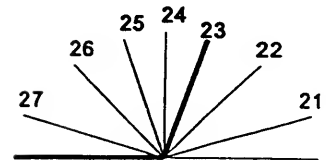
- (00) Occupant not seated or no seat  
 (01) Not adjustable

***Upright prior to impact***

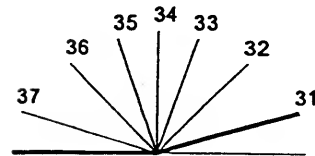
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 6

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): Back seat  
into seatback  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown



**CHILD SAFETY SEAT**55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify): \_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify): \_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify): \_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify): \_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify): \_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

64. Hospital Stay 02

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 03

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

*college***STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

## TO BE CODED BY THE ZONE CENTER

## INJURY CONSEQUENCES

## TRAUMA DATA

66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

(00) Not fatal

(96) Fatal - ruled disease

(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

(00) Not fatal or no additional causes

(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 09

9 Code the actual number of injuries recorded for this occupant.

(00) No recorded injuries

(97) Injured, details unknown

(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score 15  
(at Medical Facility)

(00) Not injured

(01) Injured - not treated at medical facility

(02) No GCS Score at medical facility

(03-15) Code the actual value of the initial GCS Score recorded at medical facility.

(97) Injured, details unknown

(99) Unknown if injured

72. Was the Occupant Given Blood? 1

(1) No - blood not given

(2) Yes - blood given

(specify units):

(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 17

(00) Not injured

(01) Injured, ABGs not measured or reported

(02-50) Code the actual value of the HCO<sub>3</sub>(96) ABGs reported, HCO<sub>3</sub> unknown

(97) Injured, details unknown

(99) Unknown if injured

Base Excess - 8

## BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 1

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Vehicle inspection

(2) Official injury data

(3) Driver/occupant interview

(8) Other (specify):

(9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**CASE VEHICLE DRIVER**



BEST AVAILABLE

U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

10

3. Vehicle Number

01

2. Case Number - Stratum

9623

4. Occupant Number

01

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	
		Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect						
Fx 2 ribs	1st	5. <u>2</u>	6. <u>4</u>	7. <u>5</u>	8. <u>02</u>	9. <u>20</u>	10. <u>2</u>	11. <u>1</u>	12. <u>151</u>	13. <u>1</u>	14. <u>1</u>	15. <u>97</u>
Contusion chest wall	2nd	16. <u>2</u>	17. <u>4</u>	18. <u>9</u>	19. <u>04</u>	20. <u>02</u>	21. <u>1</u>	22. <u>1</u>	23. <u>152</u>	24. <u>2</u>	25. <u>1</u>	26. <u>00</u>
Contusion hip	3rd	27. <u>2</u>	28. <u>8</u>	29. <u>9</u>	30. <u>04</u>	31. <u>02</u>	32. <u>1</u>	33. <u>1</u>	34. <u>152</u>	35. <u>2</u>	36. <u>1</u>	37. <u>00</u>
Abrasion arm	4th	38. <u>3</u>	39. <u>7</u>	40. <u>9</u>	41. <u>02</u>	42. <u>02</u>	43. <u>1</u>	44. <u>9</u>	45. <u>697</u>	46. <u>9</u>	47. <u>7</u>	48. <u>99</u>
Contusion elbow	5th	49. <u>3</u>	50. <u>7</u>	51. <u>9</u>	52. <u>04</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>151</u>	57. <u>2</u>	58. <u>1</u>	59. <u>97</u>
Laceration elbow	6th	60. <u>2</u>	61. <u>7</u>	62. <u>9</u>	63. <u>06</u>	64. <u>00</u>	65. <u>1</u>	66. <u>1</u>	67. <u>602</u>	68. <u>2</u>	69. <u>3</u>	70. <u>00</u>
Contusion rear scalp	7th	71. <u>7</u>	72. <u>1</u>	73. <u>9</u>	74. <u>04</u>	75. <u>02</u>	76. <u>1</u>	77. <u>6</u>	78. <u>205</u>	79. <u>1</u>	80. <u>1</u>	81. <u>97</u>
Contusion arm	8th	82. <u>7</u>	83. <u>7</u>	84. <u>9</u>	85. <u>04</u>	86. <u>02</u>	87. <u>1</u>	88. <u>2</u>	89. <u>051</u>	90. <u>1</u>	91. <u>1</u>	92. <u>00</u>
Contusion Knee	9th	93. <u>7</u>	94. <u>8</u>	95. <u>9</u>	96. <u>04</u>	97. <u>02</u>	98. <u>1</u>	99. <u>1</u>	100. <u>007</u>	101. <u>3</u>	102. <u>1</u>	103. <u>00</u>
	10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>



## OCCUPANT INJURY DATA

A.I.S. - 90

	Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90		Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
				Specific Anatomic Structure	Level of Injury					
11th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	— — — —	—	—	— — —

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>	To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		The exceptions to this rule apply to:	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	Whole Area	Abbreviated Injury Scale	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

**SOURCE OF INJURY DATA****INJURY SOURCE  
CONFIDENCE LEVEL****DIRECT/INDIRECT INJURY**OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Driver—restrained  
(ER)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

— No

✓ Yes

(ER, HP)

Blood Alcohol Level  
(mg/dl)

BAL = —

Glasgow Coma  
Scale ScoreGCS = 15  
(HP, CN1)Units of Blood  
Given

Units = —

Arterial Blood Gases

pH = 7.40

PO<sub>2</sub> = 104PCO<sub>2</sub> = 28HCO<sub>3</sub> = 17 (LR only)

Base Excess -8

LR
ER
HP
CN1

• Contusion chest wall  
shoulder belt  
(CN2)

• c/o lateral chest pain  
(HP)

• c/o pain 2nd post-crash day to spine (upper thoracic, mid back, + lumbar) + R pelvic area + buttock (CN2, PN)

• Abrasion arm, NRS, size of dime (HP)

• Bilateral hip pain (ER, CN2)

• Contusion R elbow (CN1)  
• Laceration, 1 cm R elbow (DS)

• R hip + flank pain (DS, HP, CN1)

• Soft tissue trauma R hip and pelvis (DS, HP)

• Dx: Blunt abdominal trauma with fetal demise

• R hip/buttock blunt trauma  
• R chest wall blunt trauma  
• Acute arm abrasions (HP)

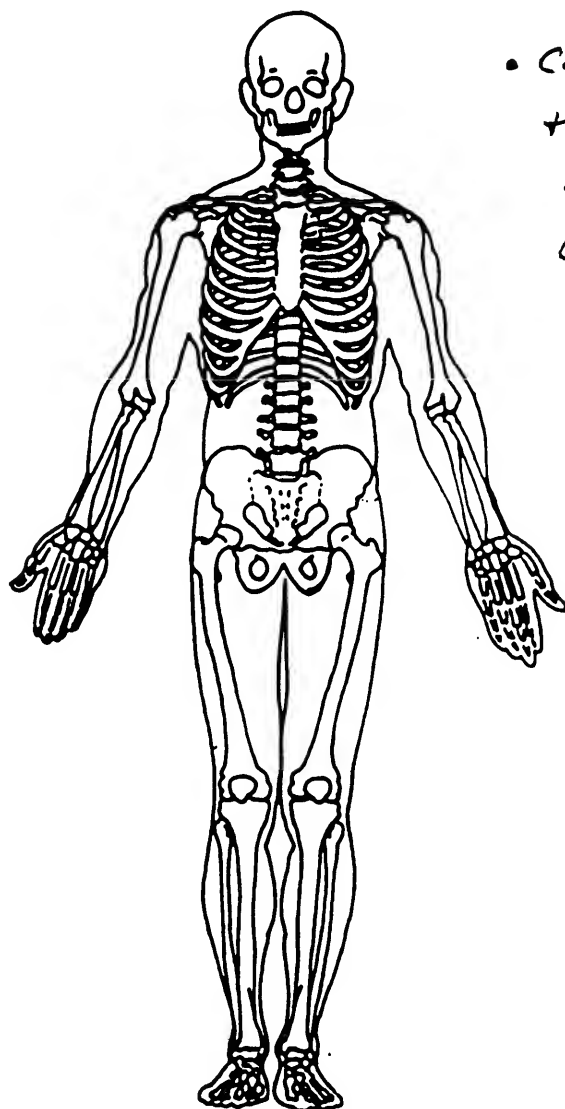
19 Year-old female  
Hospitalized 2 days  
(AR, DS)

## OFFICIAL INJURY DATA — SKELETAL INJURIES

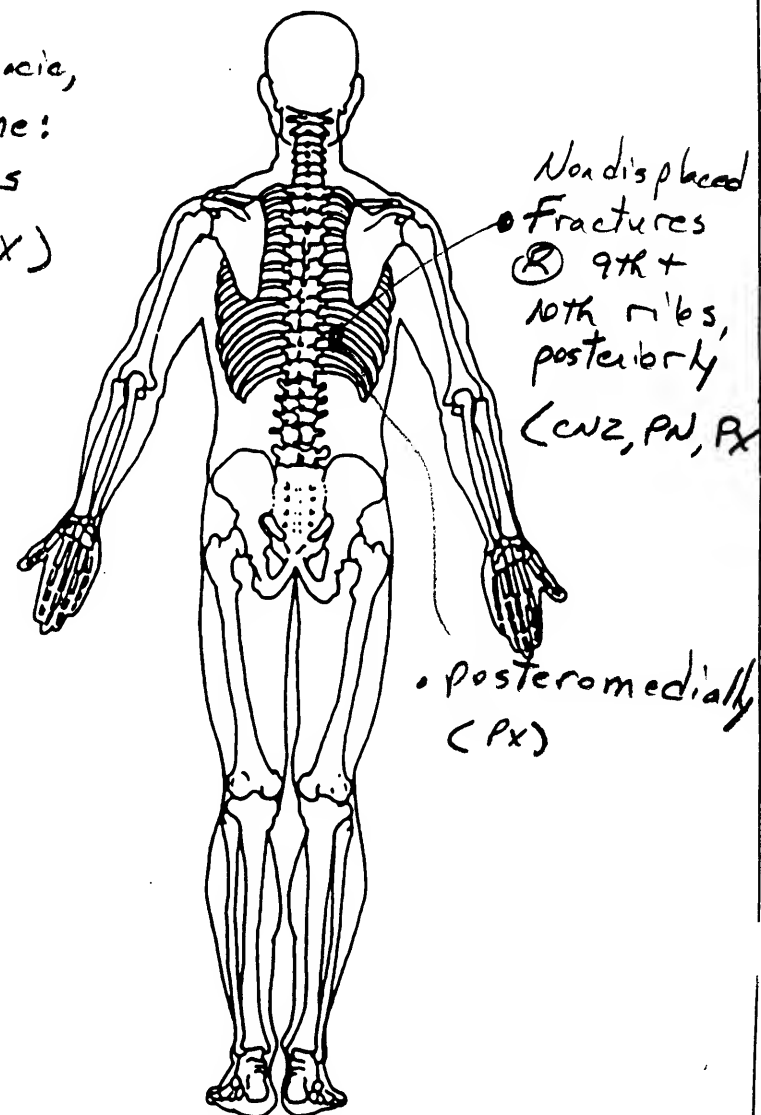
No spinal injuries (CN2)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

X-ray pelvis:  
negative  
(CN1, CN2, PN)



• Cervical, thoracic,  
+ lumbar spine:  
no fractures  
(CN2, PN, PX)



Non-displaced  
Fractures  
② 9th +  
10th ribs,  
posteriorly  
(CN2, PN, PX)

• posteromedially  
(PX)

## INJURY SOURCES

<b>FRONT</b>			
(001) Windshield	(102) Right side hardware or armrest	(183) Air bag-passenger side and object held	(411) Wall mounted head rest (used behind wheel chair)
(002) Mirror	(103) Right A (A1/A2)-pillar	(184) Air bag-passenger side and object in mouth	(412) Other eedptive device (specify): _____
(003) Sunvisor	(104) Right B-pillar	(185) Air bag compartment cover-passenger side	
(004) Steering wheel rim	(105) Other right pillar (specify): _____	(186) Air bag compartment cover-passenger side and eyewear	<b>EXTERIOR of OCCUPANT'S VEHICLE</b>
(005) Steering wheel hub/spoke	(106) Right side window glass	(187) Air bag compartment cover-passenger side end jewelry	(451) Hood
(006) Steering wheel (combination of codes 004 and 005)	(107) Right side window frame	(188) Air bag compartment cover-passenger side and object held	(452) Outside hardware (e.g., outside mirror, antenna)
(007) Steering column, transmission selector lever, other attachment	(108) Right side window sill	(189) Air bag compartment cover-passenger side and object in mouth	(453) Other exterior surface or tires (specify): _____
(008) Cellular telephone or CB radio	(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(190) Other air bag (specify) _____	(454) Unknown exterior objects
(009) Add on equipment (e.g., tape deck, air conditioner)	(110) Other right side object (specify): _____	(195) Other air bag compartment cover (specify) _____	
(010) Left instrument panel and below			<b>EXTERIOR OF OTHER MOTOR VEHICLE</b>
(011) Center instrument panel and below	<b>INTERIOR</b>		(501) Front bumper
(012) Right instrument panel and below	(151) Seat, back support		(502) Hood edge
(013) Glove compartment door	(152) Belt restraint webbing/buckle		(503) Other front of vehicle (specify): _____
(014) Knee bolster	(153) Belt restraint B-pillar or door frame attachment point		
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)	(154) Other restraint system component (specify): _____	<b>ROOF</b>	(504) Hood
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)	(155) Head restraint system	(201) Front header	(505) Hood ornament
(017) Windshield reinforced by exterior object (specify) _____	(160) Other occupants (specify): _____	(202) Rear header	(506) Windshield, roof rail, A-pillar
	(161) Interior loose objects	(203) Roof left side rail	(507) Side surface
(019) Other front object (specify): _____	(162) Child safety seat (specify): _____	(204) Roof right side rail	(508) Side mirrors
	(163) Other interior object (specify): _____	(205) Roof or convertible top	(509) Other side protrusions (specify): _____
<b>LEFT SIDE</b>	<b>AIR BAG</b>	<b>FLOOR</b>	(510) Rear surface
(051) Left side interior surface, excluding hardware or armrests	(170) Air bag-driver side	(251) Floor (including toe pan)	(511) Undercarriage
(052) Left side hardware or armrest	(171) Air bag-driver side and eyewear	(252) Floor or console mounted transmission lever, including console	(512) Tires and wheels
(053) Left A (A1/A2)-pillar	(172) Air bag-driver side and jewelry	(253) Parking brake handle	(513) Other exterior of other motor vehicle (specify): _____
(054) Left B-pillar	(173) Air bag-driver side and object held	(254) Foot controls including parking brake	(514) Unknown exterior of other motor vehicle
(055) Other left pillar (specify): _____	(174) Air bag-driver side and object in mouth	<b>REAR</b>	<b>OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT</b>
(056) Left side window glass	(175) Air bag compartment cover-driver side	(301) Backlight (rear window)	(551) Ground
(057) Left side window frame	(176) Air bag compartment cover-driver side and eyewear	(302) Backlight storage rack, door, etc.	(598) Other vehicle or object (specify): _____
(058) Left side window sill	(177) Air bag compartment cover-driver side and jewelry	(303) Other rear object (specify): _____	(599) Unknown vehicle or object
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(178) Air bag compartment cover-driver side and object held	<b>ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT</b>	<b>NONCONTACT INJURY</b>
(060) Other left side object (specify): _____	(179) Air bag compartment cover-driver side and object in mouth	(401) Hand controls for braking/acceleration	(601) Fire in vehicle
<b>RIGHT SIDE</b>	(180) Air bag-passenger side	(402) Steering control devices (attached to OEM steering wheel)	(602) Flying glass
(101) Right side interior surface, excluding hardware or armrests	(181) Air bag-passenger side and eyewear	(403) Steering knob attached to steering wheel	(603) Other noncontact injury source (specify): _____
	(182) Air bag-passenger side and jewelry	(405) Replacement steering wheel (i.e., reduced diameter)	(604) Air bag exhaust gases
		(406) Joy stick steering controls	(697) Injured, unknown source
		(407) Wheelchair tie-downs	
		(408) Modification to seat belts, (specify): _____	
		(409) Additional or relocated switches, (specify): _____	
		(410) Raised roof	



## OFFICIAL INJURY DATA — INTERNAL INJURIES

Fetal death intrauterine,  
delivered stillborn infant (DS, HP, CN1)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.) DS, HP, CN1

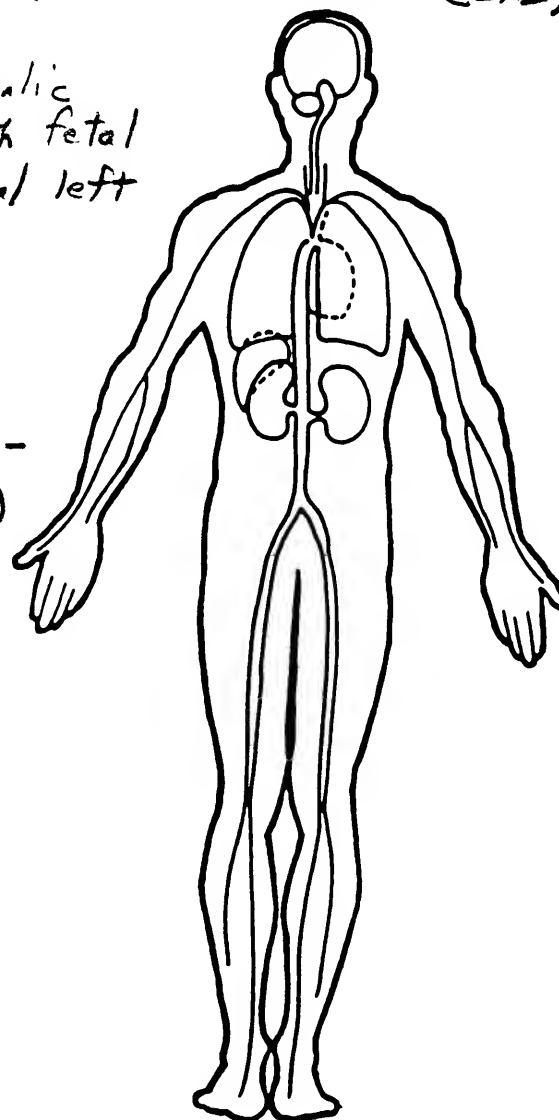
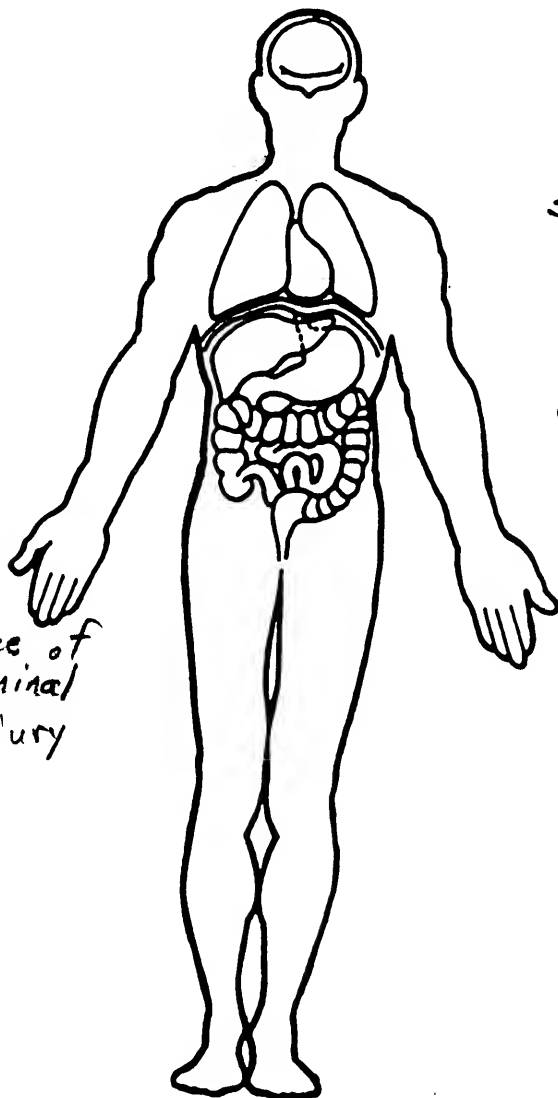
Neurologically: overtly  
intact without focal  
deficit  
(HP)

• No fetal heart tones  
or umbilical cord flow (EX1)

• Fetus in cephalic  
presentation with fetal  
spine on maternal left  
(EX2)

• No visceral  
organ perfora-  
tions (EX3)

• No evidence of  
intra abdominal  
uterus injury  
(PN)



# CAUSE OF DEATH

BEST AVAILABLE

## ICD-9-CM

### OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

### MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy—medical information based upon an invasive examination of a body
ME	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
FX	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
PN	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report—where the author of this information is undefined
EN	Emergency room nurse—"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records—taken during the patients stay in the emergency room
CV	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

LR Laboratory Record

-----  
A D M  
-----

-----  
ADMISSION RECORD  
-----

PT ADDRESS:

HOME PHONE:

EMPLOYER LV1: UNEMPLOYED

EMPLOYER CODE:

ADDRESS LV1:

PHONE LV1:

JOB TITLE LV1:

EMERG CONTACT:

REL. TO PT:

PHONE:

WORK PHONE:

ADDRESS:

RELIGION: NON

ADM DATE:

TIME:

ADM DX:

ADM TYPE:

ADM SOURCE:

SERVICE:

REFERRING PHYSICIAN:

COND CODE 1:

COND CODE 2:

DISCH DATE:

TIME:

EXP:

VIP:

LAST REG DATE:

PAT SSN:

BIRTHDATE:

ADM CLERK:

BILL TO:

RL/SHIP:

SOC SN:

ADDRESS:

EMPLOYER LV2:

PHONE LV2:

JOB TITLE LV2:

INS. CO:

INSURED:

ID#:

GROUP NAME:

GROUP NO:

PRE CERT NO:

INS. CO:

INSURED:

ID#:

GROUP NAME:

GROUP NO.:

REL:

-----  
PRINCIPAL DX:

CODES:

SECONDARY DX/COMPLICATIONS:

OPERATIONS/PROCEDURES-PRINCIPAL FIRST:

DATES:

-----

DATE:

TIME IN	TIME OUT	<input type="checkbox"/> Main E.D.	<input type="checkbox"/> Quick Care	<input type="checkbox"/> E.D. Evaluate & Call Dr.	<input type="checkbox"/> Pvt Dr. to See
ARRIVED BY: <input checked="" type="checkbox"/> Ambulance		<input type="checkbox"/> Wheelchair	<input type="checkbox"/> Carried	<input type="checkbox"/> Walk	ACCOMP. BY: <input checked="" type="checkbox"/> Self <input type="checkbox"/> Friend <input type="checkbox"/> Family <input type="checkbox"/> Police

ALLERGIES: NKA

CHIEF COMPLAINT:

- driver - restrained - bullet hit pain  
8mos pregnant - FHT audible  
Fetal Heart Tone

PMH <input type="checkbox"/> Cardiac <input type="checkbox"/> Respiratory <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypertension <input type="checkbox"/> Seizures <input type="checkbox"/> Other	TETANUS TOXOID	WEIGHT	LB	HEIGHT
PREG <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No LMP 8mos				

INITIAL VITAL STATISTICS	TEMP 100.6	PULSE 88	RESP 34	BLOOD PRESSURE 114/51	O2 SAT (If Applicable)
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VISUAL ACUITY R L OU	TRIAGE <input checked="" type="checkbox"/> Crisis <input type="checkbox"/> Urgent	TRIAGE DISP: Time
<input type="checkbox"/> Correct <input type="checkbox"/> Uncorrect <input type="checkbox"/> Contact Lenses	CLASS <input type="checkbox"/> Emer. <input type="checkbox"/> Non Urgent	<input type="checkbox"/> Q. C. <input type="checkbox"/> ED Bed #

## HISTORY OF PRESENT ILLNESS

HPI:	PH:	Current Medications:
		① prenatal ② Iron
	EDC:	
	P-1-0-1-G-2	

SOC: Tob ppd x Year ETOH: Drug Abuse

Occupation:

Pertinent Physical Exam:

PH	pO <sub>2</sub>	pO <sub>2</sub>	BE
7.349	120	104 (RA)	-8

DIAGNOSIS:

DISCHARGE INSTRUCTIONS:

<input type="checkbox"/> WRITTEN FOLLOW UP INSTRUCTIONS PROVIDED
<input type="checkbox"/> E.D. Dictation done by Physician: _____ Dictating Physician
<input type="checkbox"/> Investigating Officer: _____

E.D. DISCHARGE CONDITION			MODE OF DISCHARGE		
<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor	<input type="checkbox"/> Home	<input type="checkbox"/> MOHC	<input type="checkbox"/> Admitted: Room I
<input type="checkbox"/> Critical	<input type="checkbox"/> Stable	<input type="checkbox"/> Expired	<input type="checkbox"/> Morgue	<input type="checkbox"/> ME	Adm / Referred to:
<input type="checkbox"/> W.M.A.	<input type="checkbox"/> A.M.A.	<input type="checkbox"/> M.C.R.	<input type="checkbox"/> Funeral Home:		<input type="checkbox"/> Transfer to:
RESIDENT PHYSICIAN		STAFF ATTENDING PHYSICIAN			
RESIDENT PHYSICIAN		STAFF ATTENDING PHYSICIAN			

HEALTH INFORMATION

# PART TWO - ORDER SHEET

ORDERS - LAB	TIME	COMP ENTRY	NURSE COMPIDOC	ORDERS - LAB	TIME	COMP ENTRY	NURSE COMPIDOC
URINE:				RADIOLOGY:			
UA Urine C & S				SHIELD ABDOMEN			
GYN:				FACIAL SINUS			
PREGNANCY: Urine Serum				MANDIBLE PANOREX			
Quant $\beta$ hcg Wet Prep				SPINE: C T LS			
G.C. CULTURE				CHEST: PA/LAT PAP			
CHLAMYDIA SCREEN				RIBS L R			
CLOT TO HOLD				ABD. SERIES K.U.B.			
HEMATOLOGY:				I.V.P.			
CBC				PELVIS			
PT/PTT				HIP L R			
Type & Screen				FEMUR L R			
Type & Rh				KNEE L R			
Type & Cross X 2 units				TIB / FIB L R			
ABG's Room Air O <sub>2</sub>				ANKLE L R			
CO-Hgb				FOOT L R			
CHEMISTRY:				CLAVICLE L R			
CHEM 7 12 18				SHOULDER L R			
CARDIAC ENZYMES				HUMERUS L R			
DIALYSIS PROFILE				ELBOW L R			
O.D. PACK				FOREARM L R			
C.C.U. PACK				WRIST L R			
TRAUMA-PACK				HAND L R			
BURN PACK				NAVICULAR L R			
LIVER PROFILE				FINGER			
AMYLASE				U.S. pelvis. studies post			
MG <sup>++</sup>				CT SCAN W W/O			
LIPASE							
I-STAT: +3 +6				OTHER ORDERS:			
TOXICOLOGY:				1. EKG			
ALCOHOL (B.A.L.)				2. PULSE OX (Cont)			
TOX SCR: Urine Serum Gastric				3. RESTRAINTS x minutes			
ACETAMINOPHEN LEVEL				4. O <sub>2</sub> at			
ASPIRIN / SALICYLATE LEVEL				5. MONITORS			
PHENOBARBITAL LEVEL				6. OLD CHART			
DIGOXIN (LANOXIN) LEVEL				7. Cont. IV @ pump			
PHENYTOIN (DILANTIN) LEVEL				8. NG tube v.o. du			
THEOPHYLLINE LEVEL				9.			
MICROBIOLOGY:				10.			
THROAT: Rapid $\beta$ Strep C & S				11.			
STOOL: WBC's C & S				12.			
O & P C. Difficile				13.			
SPUTUM: C & S A.F.B.				14.			
BLOOD: C & S x				15.			

## CONSULTATIONS:

ANSWERED	DR.	PAGE
REQUESTED PHYSICIAN	STAFF ATTENDING PHYSICIAN	

HEALTH INFORMATION

(cont'd)



ADMISSION DATE:

DISCHARGE DATE:

ADMISSION DIAGNOSIS:

1. Pregnancy at 33 weeks gestation.
2. Motor vehicle accident.
3. Fetal death, intrauterine.

DISCHARGE DIAGNOSIS:

Uterine pregnancy delivered, stillborn infant.

SUMMARY:

Thea is a 19-year-old female from \_\_\_\_\_ under the care of \_\_\_\_\_. She is at 33 weeks of gestation and on a trip to \_\_\_\_\_ with her friend was involved in a motor vehicle accident of some seriousness, and was brought to \_\_\_\_\_ where on immediate evaluation, there were no fetal heart tones obtained. The ultrasound was immediately available and demonstrated no fetal cardiac activity. Her evaluation then commenced with vital signs and computed axial tomography scan to evaluate the intra-abdominal potential of the damage. There was no evidence of any bleeding or viscous injury by computed axial tomography scan. She was observed closely. She did rupture membranes and was allowed to go ahead and deliver. She delivered vaginally at \_\_\_\_\_ on \_\_\_\_\_ this stillborn infant. The placenta did show evidence of abruption. In addition to that, there was some decerebrate posturing in the baby, possibly suggesting an intracranial etiology for the fetal death. The medical examiner has removed the baby for further evaluation. She has had serial hematocrits and although she did come in with an anemia, her postpartum equilibration of her blood count shows her discharge hematocrit of 29.7. This is absolutely stable over the last 24 hours. Her abdomen is soft with good bowel sounds. She does have right hip pain and right flank pain. Her urinalysis on admission showed 3+ blood, but this again was from a catheter specimen. Her urinalysis done yesterday was completely clear. A computed axial tomography scan of the kidneys on admission was normal, except for those changes over the ureter as well as the renal pelvis of pregnancy changes. I spoke with the radiologist who read the computed axial tomography scan who commented on the fluid levels within the renal pelvis and he reports separately to me that it is a normal finding with contrast

CONTINUED

and the hydronephrosis is not any indication at all of damage to the kidney. She has seen                    on                    and                    will provide orthopedic follow-up for her. She has soft tissue trauma to the right hip and pelvis. The only skin laceration is a 1 cm laceration over the right elbow that is healing nicely. She will be discharged to home today after                    concludes his                    with her. His series of x-rays yesterday were negative for fracture/dislocation.

Discharge medications from me will be                    She will get                    for birth control in the                    Instructions and precautions have been given and she will be followed up by her                    in                    I discussed the case with                    at the time of admission when she was stabilized.

(Cont'd.)

DATE:

CHIEF COMPLAINT:

Motor vehicle accident/driver/pregnant.

HISTORY OF PRESENT ILLNESS:

The patient is a 19-year-old white female who comes to the  
as three crash/trauma victims arrive simultaneously.  
The patient has a friend of hers who was a passenger in the accident being  
evaluated in the by my associates and person from  
the other vehicle has arrived as well.

The patient indicates that she was the driver of the motor vehicle accident, a car veered into her lane, she veered to miss them, and was forced into the median and went across the median, turning the car almost in a full 180 degrees, and as she entered into traffic of ongoing traffic, the rear-end of their car was then struck by a car oncoming. The patient indicates she was wearing a seat-belt. She is thirty-three weeks gestation and was actually in from with her girlfriend who is also pregnant trying to purchase baby clothes. She complains primarily of right hip discomfort, right lateral chest discomfort and of generalized abdominal pain. The patient was transported immediately by long board C-spine precautions, with a towel rolled behind her back and intravenous in place, as well as oxygen administration. The patient had felt fetal movement earlier this afternoon.

PAST MEDICAL HISTORY:

Is unremarkable for the patient, otherwise denies other known cardiovascular, pulmonary, renal, gastrointestinal, genitourinary disease, diabetes mellitus, seizures, no other endocrine, neurologic, musculoskeletal disorder. The remaining review of systems otherwise negative. The patient's last menses approximately 8 months ago. Expected date of confinement is The patient's para 0-1-0-1, gravida 2. Her last child is approximately a year old and spent time in the newborn intensive care unit for approximately a week but has done well. Her obstetrician is

CURRENT MEDICATIONS:

Prenatal Vitamins and Iron supplementation.

ALLERGIES:

CONTINUED

None/no known drug allergies.

**SOCIAL HISTORY:**

She denies particular tobacco, alcohol or illicit drugs.

**FAMILY HISTORY:**

Is noncontributory.

**PHYSICAL EXAMINATION:**

**VITAL SIGNS:** Blood pressure: Initially 114/51 Respirations: 24 Pulse: 88 Temperature: 100.6. Oral oxygen saturation is 97 percent at 2 liters per nasal cannula on arrival.

**SKIN:** Warm and dry, pink. No overt rash, ecchymosis or petechiae. The patient does have an area of abrasion of her arm, approximately the size of a dime. No other foreign body, debris or palpable fracture.

**HEAD:** Atraumatic, normocephalic.

**EYES:** Pupils are equal, round, and reactive to light. The extraocular movements intact.

**EARS:** Canals and tympanic membranes are clear.

**NOSE:** Clear.

**THROAT:** Clear. Uvula arises in the midline. Dentition intact.

**NECK:** No complaints of pain in the C-spine, T-spine and LS-spine.

**CHEST:** Symmetrical, no crepitation, deformity. Clavicle is intact.

**LUNGS:** Clear.

**HEART:** Irregular rhythm and rate without murmur, bruit or rub. She is tender to palpation in the right chest wall from an area approximately one hand width below the axilla and for a distance of approximately one hand width, (the patient's hand).

**ABDOMEN:** Is otherwise gravid female abdomen. Uterine body is palpated to be intact at this time. No fetal movements felt by the patient or myself. The paramedics were uncertain as to whether they actually heard fetal heart tones or not enroute. They heard "something around 100, maybe 140." These were not counted abdominal auscultations, and I find no abdominal pain fetal heart tones at all at this time. The patient's abdomen is otherwise soft. Bowel sounds are decreased but present. No pain posteriorly in the flanks. The patient's uterus is generally tender but not boggy or soft. Fetal heart tones were attempted to be auscultated by myself, nursing personnel times four, as I had summoned OB gynecological. was on duty and actually was assisting with resuscitation decisions for the first patient, as other personnel from surgery and OB gynecological were also hustling to the task.

provided phone direction and agreed with stat ultrasound, another in the department was having an abdominal pain ultrasound for aorta, and I diverted the ultrasound technician from that room immediately to the

CONTINUED

patient's bedside as I saw the technician rolling the machine into the

The technician performed an ultrasound at the bedside with OB nursing personnel times two, myself and ultrasound technician visualizing no cardiac activity. The fetal structures are identified, but no pulsatile behavior of the cord. The placenta appeared to be generally intact, but it was posterior position and difficult to assess.

The patient's extremities demonstrate good and full motion of the upper extremities. The patient complains in the area of the right soft tissue buttock, as well as iliac crest region and femoral head, yet she has good motion of bilateral femoral heads, knees, ankles and feet, and the pulses are equal and active. Neurologically, the patient is overtly intact without apparent focal deficit.

#### MEDICAL DECISION MAKING:

The patient was rapidly assessed, interviewed and examined. After initial assessment, I felt the patient could be laid on her left lateral decubitus side to try to enhance hemodynamic status for the patient and hopefully for the uteroplacental unit. The patient's fetal heart tones were not ausculted successfully by me, or by ultrasound technologist. I described the findings with as he returned the call as I had also paged

for trauma assessment as well. They both came to the to assess the patient at the bedside. In the interim, laboratory had been obtained with unremarkable complete blood count and Chem 7. The patient's blood gas showed a pH of 7.40, PCO2-28, PO2-104, base excess minus 8. The patient is continued with intravenous fluids, and Foley catheter has been placed and has been sent for analysis, and nasogastric tube has been placed as well, and she is planned to go to CT scan of the abdomen.

Prior to going to CT, the patient began to have abdominal lower uterine segment cramping, and it was felt that she was going into active labor for delivery of traumatized fetus.

I discussed the findings with and and they discussed the findings as well, and it was recommended at this time, the patient go forth to CT scan to examine the abdomen for solid and hollow viscus structures. From my obstetrical standpoint, there is no particular reason to go forth with stat Cesarean section because of already present fetal demise on arrival. If the patient has other trauma at that time, there will be reconsideration of potential Cesarean section delivery, but prefers to give a trial of vaginal delivery if at all warranted. I concur.

The patient is transported to CT scan in satisfactory/stable condition. Her

CONTINUED



stepmother has arrived from                      has been at her bedside, as well as been very supportive. The patient is taken to CT scan and ultimately to labor and delivery where she has gone forth to deliver the traumatized fetus-nonsurviving.

CONDITION ON DISCHARGE FROM THE                      :  
Stable.

DIAGNOSIS:

1. Motor vehicle accident, blunt abdominal trauma with fetal demise.
2. Right hip/buttock blunt trauma.
3. Right chest wall blunt trauma.
4. Acute arm abrasions.

ADMISSION DATE:

ADMISSION DIAGNOSIS:

Status post motor vehicle accident with abdominal trauma, and intrauterine fetal demise.

HISTORY OF PRESENT ILLNESS:

This patient is a 19-year-old, Caucasian female, gravida 2, para 1, at approximately 33-weeks of gestation. The patient has had her prenatal care provided by \_\_\_\_\_ Her last visit was on \_\_\_\_\_

The patient's obstetrical history is such that she had a premature delivery approximately one year ago secondary to premature labor. The patient then had her last visit on \_\_\_\_\_ of this week. Her current doctor, she reports, has had no concerns of premature labor. She has had no hypertension or other complications. The patient was noted to have an anemia. The patient has had an uncomplicated prenatal course up until now. The patient was in a motor vehicle accident on the afternoon of \_\_\_\_\_ and was brought to \_\_\_\_\_ for evaluation. I was called to see her in consultation.

Upon arriving in the emergency room, I find that the patient is alert and oriented. She is complaining of right lower abdominal pain, intermittent contractions, and right hip pain. An evaluation had been completed, prior to my arrival, by the \_\_\_\_\_, who then summoned an ultrasonographer to confirm the intrauterine pregnancy, and that the baby did not have any fetal heart tone activity. The patient was having intermittent abdominal pain, but did not acknowledge that this labor contractions, as yet. During the process of examination, it was noted the patient was leaking clear fluid from the vagina that was nitrazine positive. The ultrasound technician has informed me that, in addition to the vertex presentation and measurements consistent with 33-weeks, that there was no evidence of abruption nor any obvious tears in the uterus, by ultrasound.

\_\_\_\_\_ is similarly present for evaluation. The initial evaluation by \_\_\_\_\_ suggests there is no obvious hemodynamic instability, and currently we have a situation in which the patient is in labor, having contractions every two to three minutes, with 3.0 cm dilation. A series of radiologic studies have been ordered to further assess potential intra-abdominal and skeletal injury.

PAST MEDICAL HISTORY:

The patient's past medical history is significant for a vaginal delivery one

CONTINUED

year ago as her only hospitalization. She had a kidney infection at age four. The patient has had no other surgeries. The patient denies any knowledge of reactions to medications or allergies to medications.

**FAMILY HISTORY:**

The family history is noncontributory.

**REVIEW OF SYSTEMS:**

There is no history of cardiovascular, respiratory, or gastrointestinal difficulties.

**LABORATORY DATA:**

On admission to the                      the blood pressure is 114/51. The respiratory rate is 24. The pulse rate is 88. The laboratory data collected to this date includes arterial blood gases showing pH of 7.39, pCO<sub>2</sub> of 28, pO<sub>2</sub> of 104, and a base deficit of 8.0. The patient has a white blood cell count of 6.9, and a hematocrit of 32.1. The platelet count is 183,000. The partial thromboplastin time is 23.0, partial thromboplastin time is 11.2. The glucose is 90.0. The sodium is 135, potassium is 4.2, chloride is 111, carbon dioxide is 20. The BUN is 12.0, and the creatinine is 0.6. The patient has a negative antibody screen. The patient's blood type is O-positive.

**PHYSICAL EXAMINATION:**

**GENERAL:** The physical examination reveals the patient is alert and oriented to person, place, and time.

**CHEST:** The examination was directed toward the abdomen and pelvis; however, the examination of the chest showed that there was no clear evidence of trauma.

**LUNGS:** The lungs demonstrated good respiratory air movement bilaterally.

**HEART:** The examination of the heart revealed a regular rate and rhythm, without murmurs.

**BREASTS:** The examination of the breasts demonstrated the typical changes of pregnancy with engorgement and vascular venous prominence.

**ABDOMEN:** The patient was nontender over the hepatosplenic area. The uterus was mildly tender. The fundal height measured 28 cm.

**EXTREMITIES:** The patient was having difficulty moving around for examination, and having right hip pain. An x-ray of the pelvis demonstrated no obvious fractures or displacements. A catheter was placed into the uterine bladder, and showed clear urine. The urinalysis is pending. There was no frank blood.

**PELVIC:** The vaginal examination showed there was no bleeding. The patient did have ruptured membranes, and appeared to be contracting approximately every two to three minutes, with the cervix completely effaced and she was dilated to 3.0 cm.

CONTINUED

The patient has contusions of the right elbow. Further examination will be completed by the emergency room physician and . Again, this is limited to the abdomen and pelvis.

**ASSESSMENT:**

Motor vehicle accident, with intrauterine fetal demise. Hemodynamically, the patient is stable. She appears to be in early labor. The etiology of the fetal demise is possibly abruption secondary to motor vehicle accident.

**PLAN:**

Our plan at this point is to complete our evaluation of the intra-abdominal status. If the liver and spleen are intact with no obvious rupture, and the patient remains hemodynamically stable, I anticipate to allow a vaginal delivery and continue close observation.

I have discussed the planned preliminary with Unless we see evidence that we need an exploration of the abdomen, we will continue to observe the patient closely.





**IMPRESSION:**

Fractures of ribs 9 and 10, nondisplaced, generalized trauma to the spine likely resulting in sprain/strain, but without evidence of true spinal or pelvic fracture. She also does have some tenderness over the chest wall, apparently due to contusion from her shoulder harness and belt.

**PLAN:**

The patient should be treatable from a symptomatic point of view, i.e. she does not require any type of spinal orthosis, brace or other apparatus. I have, however, suggested that she utilize a walker to assist in initial ambulation, as she is having sufficient pain when she tries to walk to limit her significantly. The physical therapist will see her prior to discharge, for initial evaluation and gait training with a walker. She will continue to use a walker as necessary. I will plan to see her again in my office within the next 2-3 weeks, or as any new questions or problems should develop.

## PROGRESS REPORT

NAME \_\_\_\_\_ ROOM NO. \_\_\_\_\_

ADMISSION PHYSICAL EXAMINATION		Observation and opinions of visiting and house staff
✓ NORMAL		✓ SIGN AND DATE EVERY ENTRY
GENERAL:		
EENT:	<input type="checkbox"/>	<input type="checkbox"/> HTP detected from
HEART:	<input type="checkbox"/>	<input type="checkbox"/> aneurysm @ L4/L5 from CT
LUNGS:	<input type="checkbox"/>	<input type="checkbox"/> CT - Shows no
ABDOMEN:	<input type="checkbox"/>	<input type="checkbox"/> evidence of intra abdominal vascu
NEURO:	<input type="checkbox"/>	<input type="checkbox"/> injury. her CRT approx 92
EXTREMITIES:	<input type="checkbox"/>	<input type="checkbox"/> BP stable @ 147/80 HR 100
CX IS C/G/O N+I		
FWL clear @ NIT ⊕		
Fluid in int. am L/D cc.		
PLTS NC PT, PTTAL		
We will place epidural, allow vaginal		
Explor UT for Lg tears puvoy and observe.		
Explore uterus for large tears		
Del		
C-G 2117 S <sup>2</sup> /Borel		
o abrupted placenta preceded mod bloody flow		
typical abrupt.		
placenta delivered immediately following the baby.		
① Kan		
② Epi		
UT explored & dg. + but it quickly contracted to normal size		
and less than complete.		
Continued close obs. p.O.		

## PROGRESS REPORT

NAME \_\_\_\_\_ ROOM NO. \_\_\_\_\_ DATE \_\_\_\_\_ UNIT \_\_\_\_\_

Observation and opinions of visiting and house staff  
Sign and Date Every Entry

Families requested baptism of infant. I arrived to baptize with the family present. Prayed with family. Connected with staff.

5- voiding well. unable to bear wt  
0-

Hct in @ ER mach 32

Hct this Am 28

aggravated p.p. changes

TC 1-3 firm

abd: soft active BS

NO dist.

mid CT firm only

offhand firm No flank tenderness

ly firm hip tender

sa needs O & No consult by 10/1

will re ✓ Hct @ noon

055 until Am tomorrow then DC.

Prescribed labs rec'd from

OPOL

AST @

RPR @

RT timing

HBSAG - @

## PROGRESS REPORT

NAME \_\_\_\_\_ ROOM NO. \_\_\_\_\_ DATE \_\_\_\_\_ UNIT \_\_\_\_\_

Observation and opinions of visiting and house staff  
Sign and Date Every Entry

Ortho  
 1st seen @ request. Currently c/o  
 inability to walk, pain localized to  
 spine + pelvis "from neck down". No  
 paresthesias. Locally tender over mid-thor  
 + low lumbar spine. Also over left pelvis  
 + hip. Has fair free movement of  
 hips, knees, normal neuro findings.  
 Discharged option, will need to have x-ray  
 of thor + lumbar spine, will review  
 when available.

PT hemodynamically stable  
 B7 abd.

UT @ U-2 Feb VII

Ortho consult done  
 as soon as ortho see's Ortho.

Hx "lost"  
 Discharge  
 Depa Prouy  
 Ints / Prost

Ortho reviewed. No fx's  
 of spine or pelvis seen. She does  
 have fx's of ribs 9-10 on R, which  
 can be treated symptomatically. Will  
 ask phys to see for ambulation.

## PROGRESS REPORT

NAME \_\_\_\_\_ ROOM NO. \_\_\_\_\_ DATE \_\_\_\_\_ UNIT \_\_\_\_\_

Observation and opinions of visiting and house staff  
Sign and Date Every Entry

- with pt. in use of RW no difficulty & this, with very slowly, assist walker for home use.

Social work - initial interview w/ pt. to assess coping abilities w/ infant loss. Pt. is a 19yo who resides in \_\_\_\_\_ w/ her father and step-mother. There are a lot of family & friend support providing emotional support. She is very involved and providing support. He resides in \_\_\_\_\_ w/ his family. Pt's mother also lives in \_\_\_\_\_ Pt. plans to return to \_\_\_\_\_ for a short time and the move back to \_\_\_\_\_ Pt. discussed emotional difficulties and normal feelings for grief. Discussed grief process and coping abilities. Pt. is good friends w/ passengers since 8th grade, expressed difficulty w/ friends injuries. Pt. plans to have a funeral on \_\_\_\_\_ w/ a lot of family & friends. Will continue to follow if needed.



## AT-HOME GUIDELINES and DISCHARGE NOTES

## TAKE HOME PRESCRIPTIONS: (Medication, Dose, Schedule Route)

Darvocet take 1 or 2 pills every 4 hours as needed for pain.

Motrin as directed for aches & cramps

Colace - stool softener as needed for BM

Depo Provera given

Receive another shot in 3 months

## ADDITIONAL INSTRUCTIONS: (Special Diet, Procedure, Activity)

FOLLOW-UP APPOINTMENT: 2-3 weeks with also

I have been instructed in and understand the above information and have received a copy.

Signature of patient or responsible party: X

## DISCHARGE ASSESSMENT: All areas that are checked "no" must be explained in the Discharge Notes.

Physician Order for Discharge:	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Patient Pain Free on Day of Discharge:	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Attending and Consults Notified:	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If No, Is Pain Management Plan in Place:	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
IV / HL / TL Discontinued Per MD Order:	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Discharge Instructions & Copy to Patient:	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Prescriptions Given to Patient:	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Personal Belongings Given to Patient:	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Method of Transportation:				Accompanied By:			
Vital Signs: T 98° P 65 R 16 B/P 123/68				NURSE'S SIGNATURE:			

DOB :	PT. TYPE :	PT. NAME :
AGE/SEX :	LOCATION :	MED REC# :
DOCTOR :	ADM/DISCH :	ROOM/BED :

Pathologists:

\*\*\*\*\*  
\*  
\*\*\*\*\*

Day of Week:  
Collected:  
Time:

				Units	Ref Range
WBC	8.3	9.6	11.1 H	6.9	TH/MM3 [4.0-10.4]
RBC	3.21 L	3.06 L	3.20 L	3.36 L	MI/MM3 [3.90-5.10]
HGB	10.4 L	9.9 L	10.4 L	11.1	G/DL [11.0-15.0]
HCT	29.7 L	28.2 L	29.5 L	32.1 L	% [34.0-45.0]
MCV	92.5	92.2	92.2	95.5	FL [82.0-99.0]
MCH	32.4	32.4	32.5	33.0	PG [27.0-34.0]
MCHC	35.0	35.1 H	35.3 H	34.6	% [33.0-35.0]
RDW	12.9	12.8	12.5	12.2	% [11.3-15.3]
PLATELETS	144 L	140 L	148 L	183	TH/MM3 [150-433]
MPV	8.9	9.5	9.2	7.2	FL [6.6-9.5]
PLATELET EST.	DECREASE *	DECREASE *	DECREASE *		
SEGS	76 H	78 H	76 H		% [34-66]
BANDS	2 L	6	21 H		% [5-11]
LYMPHOCYTES	17 L	9 L	2 L		% [23-48]
MONOCYTES	4	7	1		% [0-12]
EOSINOPHILS	1				% [0-3]
POLYCHROMASIA	1+	1+			
HEMOGRAM (					
HEMOGRAM (					

\*\*\*\*\*  
\* URINALYSIS \*  
\*\*\*\*\*

Day of Week:  
Collected:  
Time:

			Units	Ref Range
SPEC. GRAVITY	1.014	1.018		[1.003-1.040]
PH	7.0	6.5		[4.8-8.0]
PROTEIN	NEGATIVE	2+ *		
GLUCOSE	NEGATIVE	NEGATIVE		
ACETONE	NEGATIVE	NEGATIVE		
BLOOD	NEGATIVE	3+ *		
BILIRUBIN	NEGATIVE	NEGATIVE		
UROBILINOGEN	0.2	0.2		[0.2-1.0]
NITRITE	NEGATIVE	NEGATIVE		
WBC ESTERASE	NEGATIVE	NEGATIVE		
COLOR	YELLOW	YELLOW		
TURBIDITY	CLEAR	CLEAR		
RBC /HPF		13		
WBC /HPF		3		

**Legend**

L = Low, H = High, \* = Abnormal Alpha

DOB :	PT. TYPE :	PT. NAME :
AGE/SEX :	LOCATION :	MED REC# :
DOCTOR :	ADM/DISCH :	ROOM/BED :

Pathologists:

\*\*\*\*\*  
\* . COAGULATION \*  
\*\*\*\*\*

Day of Week:  
Collected:  
Time: \_\_\_\_\_

		Units	Ref Range
PROTIME	11.2	SEC	[10.0-14.0]
INR	0.87		
PT RATIO	0.9		
PTT	23.1	SEC	[20.0-33.0]

\*\*\*\*\*  
\* CHEMISTRY BLOOD GASES \*  
\*\*\*\*\*

Day of Week:  
Collected:  
Time: \_\_\_\_\_

		Units	Ref Range
----- Arterial Blood Gases -----			
PH	7.40		[7.38-7.42]
PCO2	28L	MMHG	[35-45]
PO2	104H	MMHG	[83-100]
BASE EXCESS	-8.0L		[-2.0-2.0]
O2 SATURATION	98.0	%	[94.0-99.9]
HC03	17.0L	MEQ/L	[21.0-28.0]
----- Blood Gases with entries in the columns below were performed on Near Patient Instrumentation -----			
O2 DEVICE	ROOM AIR		
PATIENT TEMP	37.0		
SPECIMEN TYPE	ARTERIAL		
ISTAT IN ER BY	249663		

\*\*\*\*\*  
\* CLINICAL CHEMISTRY \*  
\*\*\*\*\*

Day of Week:  
Collected:  
Time: \_\_\_\_\_

		Units	Ref Range
GLUCOSE	90	MG/DL	[65-110]
SODIUM	135	MEQ/L	[135-145]
POTASSIUM	4.2	MEQ/L	[3.5-4.8]
CHLORIDE	111	MEQ/L	[104-111]
CARBON DIOXIDE	20 L	MEQ/L	[21-29]
BUN	12	MG/DL	[5-25]
CREATININE	0.6	MG/DL	[0.4-1.5]
----- Calculated Values -----			
ANION GAP	4.00 L	MEQ/L	[5.00-15.00]
BUN/CREAT RATIO	20.00		[6.00-20.00]
CALC OSMOLALITY	269.39 L		[273.00-304.00]

**Legend**

L = Low, H = High

PT. NAME :  
MED REC# :  
ROOM/BED :  
PRINT DAT/TIME :

COAGULATION

BLOOD GASES

CLINICAL CHEM

PAGE 2

DOB :	PT. TYPE :	PT. NAME :
AGE/SEX :	LOCATION :	MED REC# :
DOCTOR :	ADM/DISCH :	ROOM/BED :

Pathologists:

\*\*\*\*\*  
 \* BLOOD BANK CUMULATIVE \*  
 \*\*\*\*\*

Day of Week:  
 Collected:  
 Time: \_\_\_\_\_

----- Blood Group and Type -----  
 ABO RH TYPE           O POS  
 ABORH RETYPE         O POS

----- Antibody Screening and Testing -----  
 ANTIBODY SCREEN   NEGATIVE

\*\*\*\*\*  
 \* BLOOD BANK CROSS MATCH SUMMARY \*  
 \*\*\*\*\*

Collection	Date	Time	Unit Number	Interpretation	Accession Number
-----	-----	-----	-----	-----	-----

\*\*\*\*\*  
 \* PENDING PROCEDURES \*  
 \*\*\*\*\*

Ordered	Procedure	Collection Status	Accession #	Ordering Physician
-----	-----	-----	-----	-----

\*\*\*\*\*  
 \* CANCELLED PROCEDURES \*  
 \*\*\*\*\*

Ordered	Procedure	To be collected	Reason	Cancelled by
-----	-----	-----	-----	-----

DOB :	PAT TYPE :	PAT NAME :
AGE/SEX :	LOCATION :	MED REC #:
DR. :		ROOM/BED :

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
LUMBAR SPINE ROUTINE THORACIC SPINE AP&LAT			

No compression fracture is seen in the lumbar spine or thoracic spine. Fine curvilinear lucency is seen projected over the posteromedial aspect of the right ninth rib and another is projected over the posteromedial aspect of the right tenth rib. As far as can be determined these are not artifacts and presumed to be due to nondisplaced rib fractures. Otherwise the ribs as visualized appear normal. A rib series could be done for further evaluation if indicated. The transverse processes in the lumbar spine are partially obscured by overlying fecal material but no abnormality is seen. The visualized portions of the pelvis appears intact. On the swimmer's view of the cervical - upper thoracic spine, the normal cervical lordosis appears straightened which could be due to positioning of muscle spasm.

IMPRESSION:

-1- Findings consistent with nondisplaced fractures of the right ninth and tenth ribs and otherwise within normal limits in appearance.

REASON FOR EXAM: INJURY

Dictated by:

Transcribed:



DOB :	PAT TYPE :	PAT NAME :
AGE/SEX :	LOCATION :	MED REC # :
DR. :		ROOM/BED :

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CHEST AP			

The heart is not enlarged. Pulmonary markings on the right appear prominent, probably merely due to the supine position plus the effect of rotation. Lungs appear clear of active disease.

REASON FOR EXAM: CHEST PAIN

DICTATED BY:

TRANSCRIBED:

DOB :	PAT TYPE :	PAT NAME :
AGE/SEX :	LOCATION :	MED REC #:
DR. :		ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PELVIS AP ONLY			

Single fetus is seen in the cephalic presentation with the fetal spine on the maternal left. The abdominal area and pelvis of the fetus are largely obscured by overlying gas and fecal material. The distance between the pubic bones is about 5 mm, which is within physiologic limits for a pregnant female. Patient is a little rotated. Bones of the pelvis are within normal limits in appearance for this age. No fracture or dislocation or arthritic change of the visualized portion of the proximal femur is seen. There are some lucencies projected over the right transverse processes of L3 and L4 but these appeared intact on the CT examination and these lucencies appear to be due to overlying lucencies from bowel. Moderate amount of gas and fecal material are noted in the colon. Report was called at 9:40 a.m. by

REASON FOR EXAM: INJURY

Dictated by:

Transcribed:

DOB :	PAT TYPE :	PAT NAME :
AGE/SEX :	LOCATION :	MED REC #:
DR. :	ADM/DIS :	ROOM/BED :

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CT ENTIRE ABDOMEN WITH INF			

INDICATION: MOTOR VEHICLE ACCIDENT

The patient has a known intrauterine gestation currently being seen after a motor vehicle accident.

No comparison studies. Contiguous axial images were obtained from the lower lung fields to the pubic symphysis after the administration of contrast medium.

Tomographic images show the intrauterine gestation to be in the vertex position with the spinal column facing the left. A nasogastric tube is in place with distal tip within the stomach lumen. The visualized lung fields are clear without evidence of pulmonary infiltrates or pleural effusions. Bilaterally, both kidneys demonstrate appropriate contrast enhancement. However, on initial scans, the renal pelvis shows dilatation with a fluid-fluid level. The ureters can be followed due to dilatation to roughly the superior half of the ileum. At this point the uterus is seen to compress the ureters. On delayed images, both ureters were filled to roughly the superior iliac crest on the left and mid ileum on the right. Again obstruction was then produced by the uterus. There is no evidence of visceral organ perforation or fluid collections. The liver, gallbladder, spleen, adrenals, pancreas, and visualized gastrointestinal tract are radiographically unremarkable without evidence of adenopathy. A Foley catheter and gas is identified within the depressed bladder lumen. The uterus is intact without evidence of perforation.

IMPRESSION:

- 1- In a patient status post MVA who is currently carrying single intrauterine gestation, no evidence of visceral organ perforation.
- 2- Hydronephrosis with distal obstruction to both ureters due to compression from the uterus and its contents.

Results were called to

DICTATED BY:

DOB :	PAT TYPE :	PAT NAME :
AGE/SEX :	LOCATION :	MED REC # :
DR. :	DADM/DIS :	ROOM/BED :

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CT ENTIRE ABDOMEN WITH INF			

TRANSCRIBED:

DOB :	PAT TYPE :	PAT NAME :
AGE/SEX :	LOCATION :	MED REC #:
DR. :	:	ROOM/BED :

PROCEDURE	DATE/TIME	ORDERING PHYSICIAN	ACC #
-----	-----	-----	-----
USP OB FETAL VIABILITY			

Two sonographic images of the abdomen were obtained in this pregnant patient demonstrating absolutely no fetal heart tones or umbilical cord flow.

Results of this dictation were called to the emergency room.

REASON FOR EXAM: MOTOR VEHICLE ACCIDENT

Dictated by:

Transcribed:



**NASS CDS OCCUPANT INJURY FORM:  
FETUS IN CASE VEHICLE DRIVER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

BEST AVAILABLE  
Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>9623</u>	4. Occupant Number	<u>Fetus in Driver</u> <u>X</u>

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	A.I.S. - 90				Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number		
		Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity						
Subarachnoid, 1st, 5th, hemorrhage, bilaterally	5.	6. <u>1</u>	7. <u>4</u>	8. <u>06</u>	9. <u>84</u>	10. <u>3</u>	11. <u>3</u>	12. <u>697</u>	13. <u>9</u>	14. <u>7</u>	15. <u>99</u>
2nd	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.
3rd	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.
4th	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.
5th	49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.
6th	60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.
7th	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.

## OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	— — —	—	—	— — —

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck			(3) Bilateral
(4) Thorax			(4) Central
(5) Abdomen			(5) Anterior
(6) Spine		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region

**Type of Anatomic Structure**

- (1) Whole Area  
 (2) Vessels  
 (3) Nerves  
 (4) Organs (includes Muscles/ligaments)  
 (5) Skeletal (includes joints)  
 (6) Head - LOC  
 (9) Skin

Whole Area

- (02) Skin - Abrasion  
 (04) Skin - Contusion  
 (06) Skin - Laceration  
 (08) Skin - Avulsion  
 (10) Amputation  
 (20) Burn  
 (30) Crush  
 (40) Degloving  
 (50) Injury - NFS  
 (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC  
 (04) Level  
 (06) of  
 (08) Consciousness  
 (10) Concussion

**Abbreviated Injury Scale**

- (1) Minor Injury  
 (2) Moderate Injury  
 (3) Serious Injury  
 (4) Severe Injury  
 (5) Critical Injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

Spine

- (02) Cervical  
 (04) Thoracic  
 (06) Lumbar

**SOURCE OF INJURY DATA****INJURY SOURCE****CONFIDENCE LEVEL****DIRECT/INDIRECT INJURY**OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):  
 (9) Police

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

- (1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (7) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol Level  
(mg/dl)

BAL = 0  
(A)

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

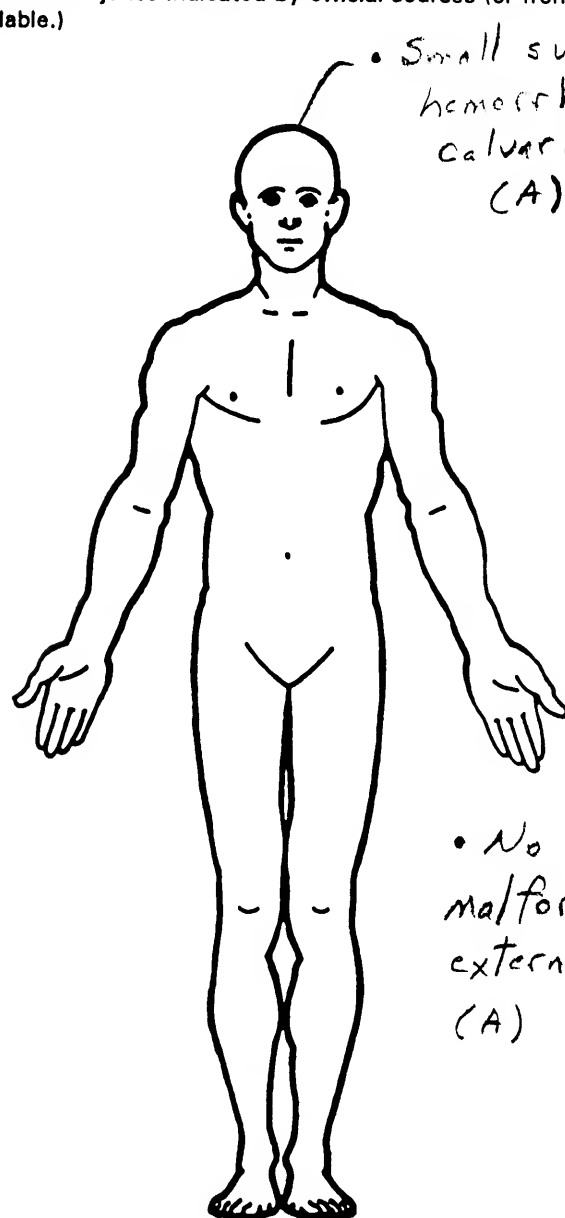
Arterial Blood Gases

pH = \_\_\_

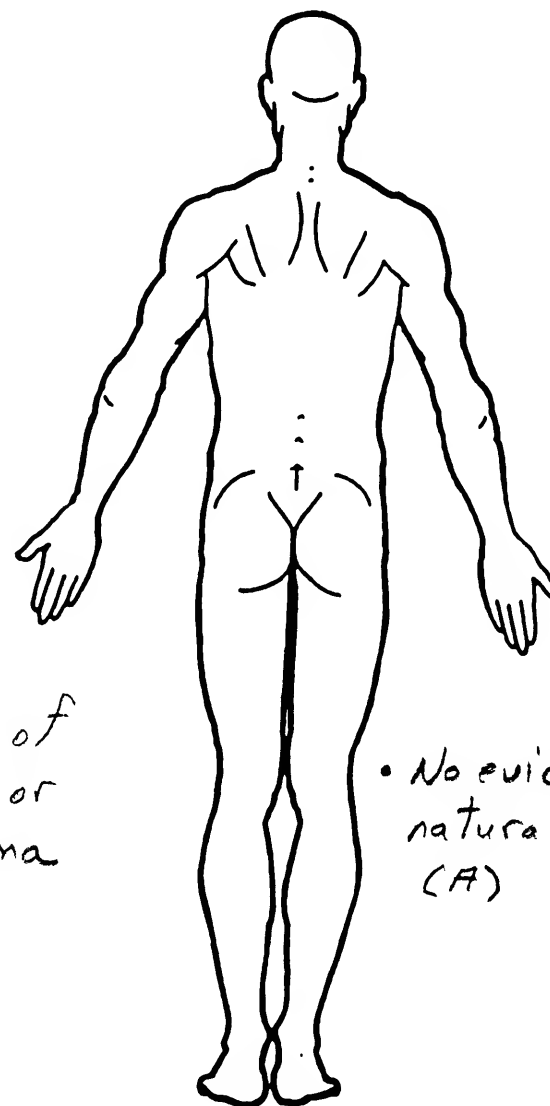
PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> = \_\_\_

HCO<sub>3</sub> = \_\_\_

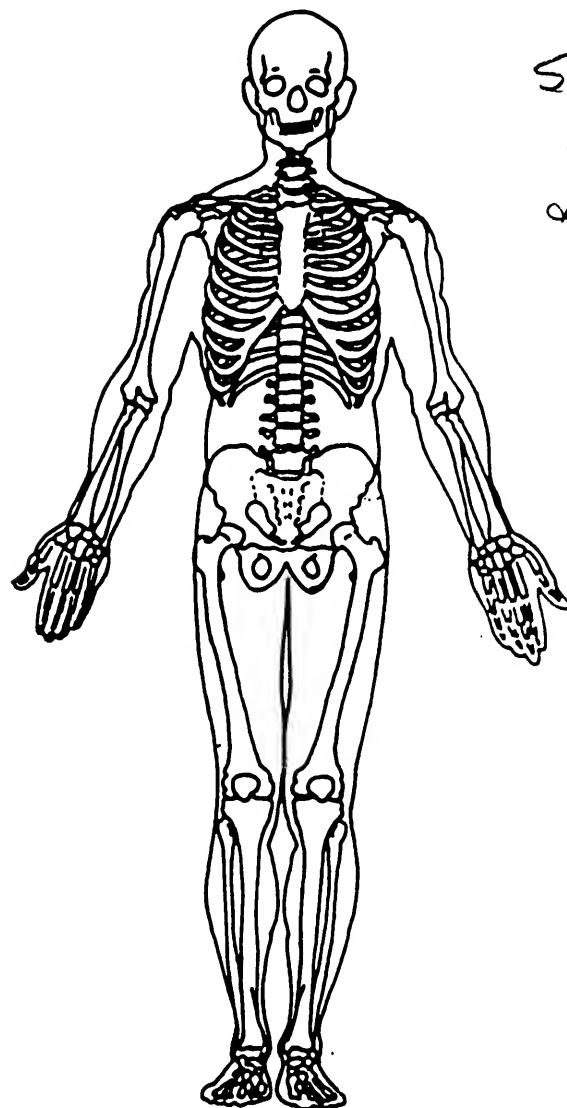


• No evidence of malformation or external trauma (A)

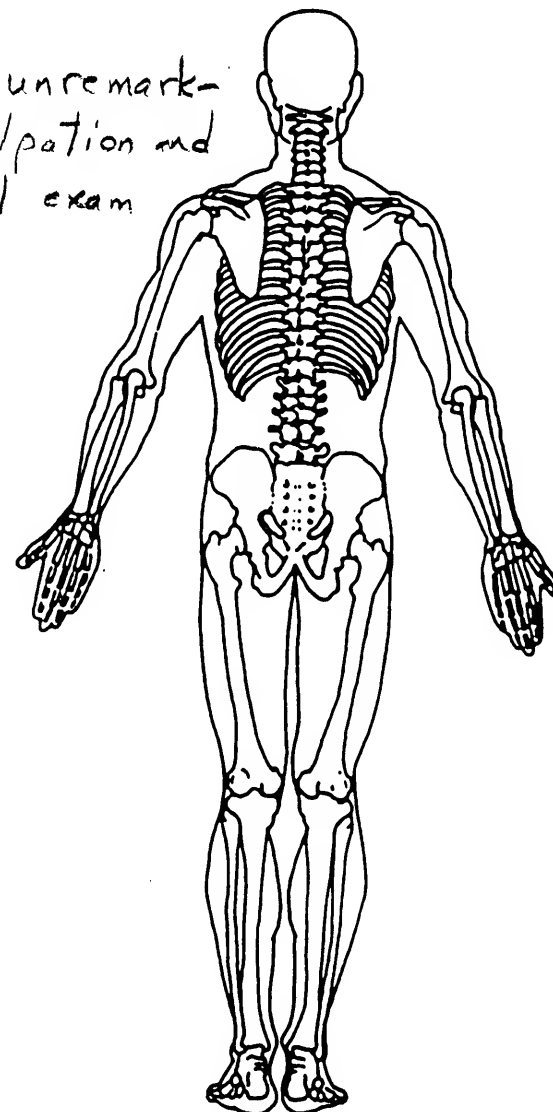


## OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



Skeletal: unremarkable by palpation and direct visual exam  
(A)





## INJURY SOURCES

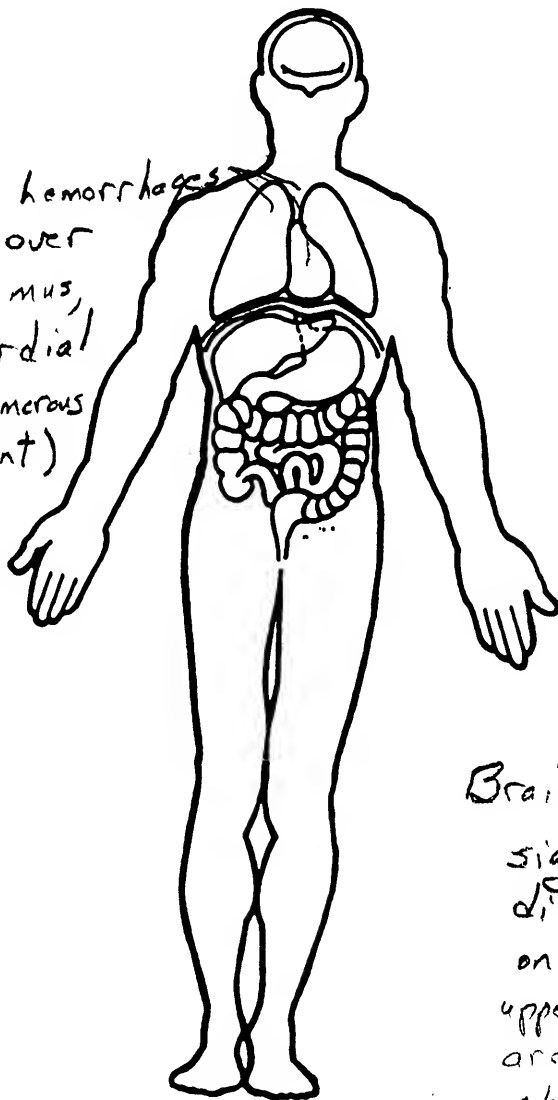
- FRONT**
- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_
- LEFT SIDE**
- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_
- RIGHT SIDE**
- (101) Right side interior surface, excluding hardware or armrests
- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_
- INTERIOR**
- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_
- AIR BAG**
- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry
- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_
- ROOF**
- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top
- FLOOR**
- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake
- REAR**
- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_
- ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT**
- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts. (specify): \_\_\_\_\_
- (409) Additional or relocated switches. (specify): \_\_\_\_\_
- (410) Raised roof
- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_
- EXTERIOR of OCCUPANT'S VEHICLE**
- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects
- EXTERIOR OF OTHER MOTOR VEHICLE**
- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle
- OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object
- NONCONTACT INJURY**
- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — INTERNAL INJURIES

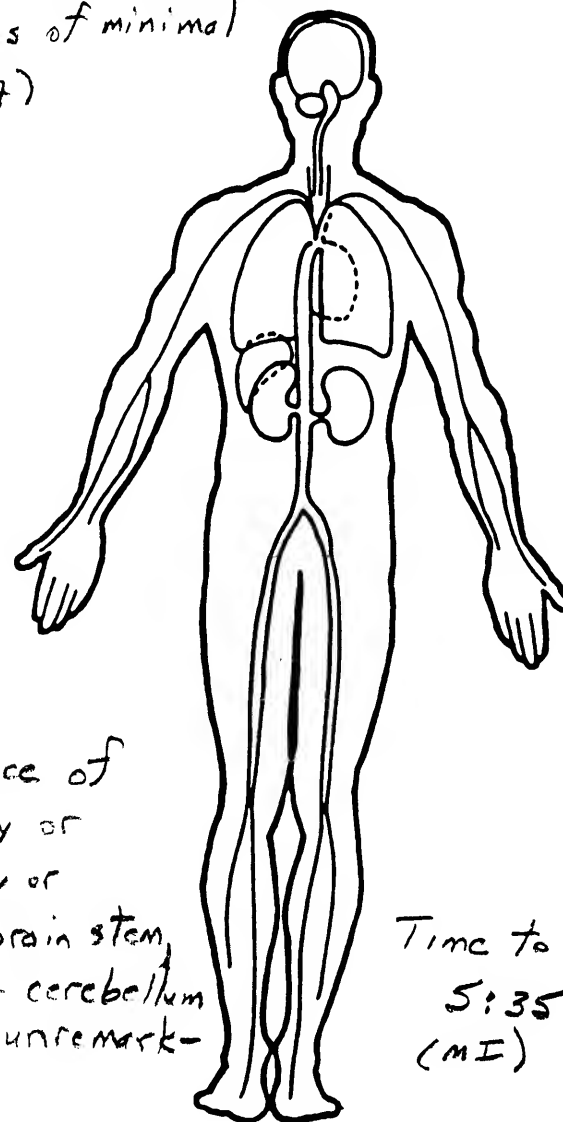
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

• Petechial hemorrhages are noted over lungs, thymus, and epicardial surface (numerous and confluent)

(A)



• Patchy subarachnoid hemorrhage over cerebral hemispheres of minimal amount (A)



Brain: no evidence of significant injury or disease, externally or on cut section; brain stem, upper cervical cord, + cerebellum are all intact and unremarkable (A)

Time to Death  
5:35  
(MI)

# CAUSE OF DEATH

BEST AVAILABLE

Abruptio Placentae 2° Maternal Trauma (MI, A)

## ICD-9-CM

### OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

### MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy—medical information based upon an invasive examination of a body
ME	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
FX	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
PN	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report—where the author of this information is undefined
EN	Emergency room nurse—"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records—taken during the patients stay in the emergency room
CV	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source—medical information based on a other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

MI Medical Examiner's Report of Investigation

BEST AVAILABLE

OFFICE USE ONLY

Re. \_\_\_\_\_ Co. \_\_\_\_\_

I hereby certify that this is a true and correct copy of the original document. Valid only when copy bears imprint of the office seal.

By \_\_\_\_\_  
Date \_\_\_\_\_

DECEDENT—First—Middle—Last Names (Please avoid use of initials)	Age	Birth Date	Race	Sex	Marital Status
HOME ADDRESS—No. Street, City, State	Occupation				
	N.A.				

TYPE OF DEATH: (Check one only)		Unattended during fatal illness <input type="checkbox"/>		If motor vehicle accident, check one of the following
While in penal incarceration <input type="checkbox"/>	Found dead without obvious cause <input type="checkbox"/>	*Under suspicious circumstances <input type="checkbox"/>		
After unexplained coma <input type="checkbox"/>	*Violent, unusual or unnatural <input checked="" type="checkbox"/>	*Means: MOTOR VEHICLE		
During therapeutic procedure <input type="checkbox"/>				
Death possible threat to public health <input type="checkbox"/>				
Unattended stillbirth or by midwife only <input type="checkbox"/>				DRIVER <input type="checkbox"/>
				CYCLIST <input type="checkbox"/>
				PASSENGER <input checked="" type="checkbox"/>
				PEDESTRIAN <input type="checkbox"/>

EXAMINER NOTIFIED BY—NAME—TITLE (AGENCY, INSTITUTION, OR ADDRESS)	DATE	TIME
INJURED OR BECAME ILL AT (ADDRESS)	CITY OR COUNTY	TYPE OF PREMISES
LOCATION OF DEATH (ADDRESS OR NAME OF INSTITUTION)	CITY OR COUNTY	TYPE OF PREMISES
BODY VIEWED BY MEDICAL EXAMINER AT (ADDRESS)	CITY OR COUNTY	TYPE OF PREMISES

DESCRIPTION OF BODY	RIGOR	LIVOR	EXTERNAL OBSERVATIONS	NOSE	MOUTH	EARS
EXTERNAL PHYSICAL EXAMINATION	Jaw <input type="checkbox"/> Complete <input type="checkbox"/>	Color _____	Clothed <input type="checkbox"/> Unclothed <input type="checkbox"/>	BLOOD		
	Neck <input type="checkbox"/> Absent <input type="checkbox"/>	Anterior <input type="checkbox"/>	Partly clothed <input type="checkbox"/> Half <input type="checkbox"/>	FROTH		
	Arms <input type="checkbox"/> Passed <input type="checkbox"/>	Posterior <input type="checkbox"/>	Beard _____ Mustache _____	OTHER (Sand, dirt, water, etc.)		
	Legs <input type="checkbox"/> Decomposed <input type="checkbox"/>	Lateral <input type="checkbox"/>	Circumcised <input type="checkbox"/>	(cm) _____ (kg) _____		
Significant observations and injury documentation—(Please use space below)		Regional _____	Eyes _____ Pupils: Opacities, Etc. _____	LENGTH _____ WEIGHT _____		
			R _____ L _____	BODY HEAT: _____		

SEE AUTOPSY PROTOCOL

Probable cause of death:	Manner of death: (Check one only)	Case disposition:
	Natural <input type="checkbox"/> Accident <input checked="" type="checkbox"/>	Autopsy: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Suicide <input type="checkbox"/> Homicide <input type="checkbox"/>	Authorized by _____
	Unknown <input type="checkbox"/> Pending <input type="checkbox"/>	Pathologist _____
MEDICAL EXAMINER Name, Address and Telephone No.	Not a medical examiner case <input type="checkbox"/>	

I hereby state that, after receiving notice of the death described herein, I conducted an investigation as to the cause and manner of death, as required by law, and that the facts contained herein regarding such death are true and correct to the best of my knowledge and belief.

County of \_\_\_\_\_

Date \_\_\_\_\_

Signature of Medical Examiner \_\_\_\_\_

**AMENDMENT TO REPORT OF INVESTIGATION**

**Full Name of Decedent** \_\_\_\_\_

**Date of Death:**

**City/County of Death:**

**File Number:**

**Medical Examiner:**

**ITEMS AMENDED:**

☐ **Cause of Death**

☐ **Manner of Death**

☒ **Other**

**NAME CHANGE TO:**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature**

BEST AVAILABLE

## OFFICE USE ONLY

I hereby certify that this is a true and correct copy of the original document. Valid only if

By

Date

DECEDENT First-Middle-Last Names (Please avoid use of initials)

Age

Birth Date

Race

Sex

Marital Status

SB

W

M

SINGLE

AUTOPSY

Authority for Autopsy

Present at Autopsy

Identified By

TOE TAG

## TYPE OF DEATH

☐ While in penal incarceration  
☐ After unexplained coma  
☐ During therapeutic procedure

☐ Death possible threat to public health  
☐ Unattended stillbirth or by midwife only  
☐ Unattended during fatal illness  
☐ Found dead without obvious cause

☐ Under suspicious circumstances  
☒ Violent, unusual or unnatural

\*Means: MOTOR VEHICLE

PATHOLOGICAL DIAGNOSIS

I. Status post maternal trauma with abruptio placentae and fetal death.

CAUSE OF DEATH:

ABRUPTIO PLACENTAE SECONDARY TO MATERNAL TRAUMA

AUTOPSY NO.

CASE NO.

The facts stated herein are true and correct to the best of my knowledge and belief.

Signature of Pathologist

Date and time of autopsy

Place of autopsy



**EXTERNAL EXAMINATION**

BEST AVAILABLE

**AUTOPSY NO.****CASE NO.**

## =====

DESCRIPTION								
Height	Weight	Eyes	Pupils	Opacities, Etc.	Hair	Beard	Mustache	Circumcised
17.5 in.	2.2 kg.	BROWN	R 3 mm L 3 mm		DARK	N	N	NO
RIGOR (jaw, neck, back, legs, arm, chest, abd., complete)				LIVOR (color, anterior, posterior, lateral, regional)			Body Heat	
ABSENT				INDETERMINATE			COOL	

The body is that of a well-developed, well-nourished white male newborn showing no evidence of malformation or external trauma. Eyes are clear and show no petechiae although the corneas are clouded. Anal and genital regions appear intact and unremarkable with anus being patent.

Head, neck, chest, abdomen and back are intact and unremarkable. Arms, hand, legs and feet are intact and unremarkable.

Accompanying the infant is a formalin-fixed placenta weighing 320 gms and measuring 5 inches in diameter and 1 1/4 inches in thickness with a centrally attached 14 inch long umbilical cord having normal three vessels. The maternal surface of the placenta shows some tearing with associated detached blood clot. The membranes, themselves, appear to have been unremarkable with areas of apparent thickening and fibrosis.

## INTERNAL EXAMINATION

BEST AVAILABLE

AUTOPSY NO.

CASE NO.

=====

The body is opened through the usual "Y" shaped incision and the chest plate is removed in the usual manner showing the internal organs to be in their normal position and relationship with no abnormal effusions seen. Petechial hemorrhages are noted over the lungs, thymus, and epicardial surface with the epicardial surface showing numerous confluent hemorrhages. Otherwise, the internal organs are unremarkable.

### ORAL AND NECK ORGANS:

The tongue appears intact and unremarkable. Epiglottis, glottis, and airway are normally formed, widely patent and unremarkable. Soft tissues and cartilaginous structures of the neck appear to have been within normal limits.

### HEART:

14 gm, normally located, normally formed and shows no abnormalities. Ductus is patent and thoracic and abdominal aortas are intact and unremarkable.

### LUNGS:

Right lung weighs 28 gm and the left lung weighs 20 gm. Except for pleural petechial hemorrhages, they appear intact and unremarkable. They appear unaerated.

### G.I. TRACT:

The esophagus, stomach, duodenum, small intestines, large intestines and appendix are all intact and unremarkable. The stomach is empty. Remainder of intestines contain normal quantities of material with extensive meconium in the large intestines.

### SPLEEN:

8 gm, intact, and unremarkable.

### PANCREAS:

Grossly within normal limits.

**INTERNAL - 2      CASE NO;**

**LIVER:**

110 gm, intact, and unremarkable with a normal gallbladder attached. Bile is easily expressed through the ampulla.

**ADRENAL GLANDS:**

Bilaterally similar and grossly within normal limits.

**KIDNEYS:**

10 gm each with fetal lobulations and normal external and cut section architecture with normal ureters ending in a normal bladder that contains no urine and has a normal prostate attached.

**TESTES:**

Bilaterally similar, normally located in the scrotal sac, and grossly within normal limits.

**CNS:**

The scalp is reflected in the usual manner and shows no underlying injury. There does appear to be molding of the calvarium with overlapping sutures and with a small amount of subperiosteal hemorrhage, but other wise the calvarium is normally formed and unremarkable. Opening along the suture lines reveals patchy subarachnoid hemorrhage over the cerebral hemispheres of minimal amount. Brain is normally formed, weighs 280 gm and showing no evidence of significant injury or disease, externally or on cut section. The brain stem, upper cervical cord, and cerebellum are all intact and unremarkable. Cerebrovascular and cranial nerves appear to arise and distribute normally.

**SKELETAL:**

The base of the skull, spine, ribs, pelvis, and long bones of extremities including scapulae, clavicles, and sternum appear intact and unremarkable by palpation and by direct visual exam where possible. Bone marrow is within normal limits. Nasal bones, facial bones, and mandible appear intact and unremarkable by palpation.

The umbilical cord is clamped with a plastic clamp and appears unremarkable.

**MICROSCOPIC DESCRIPTION**

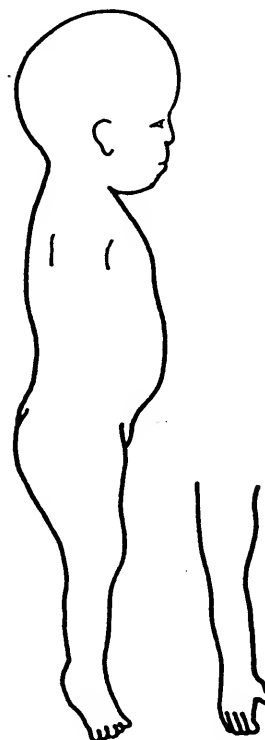
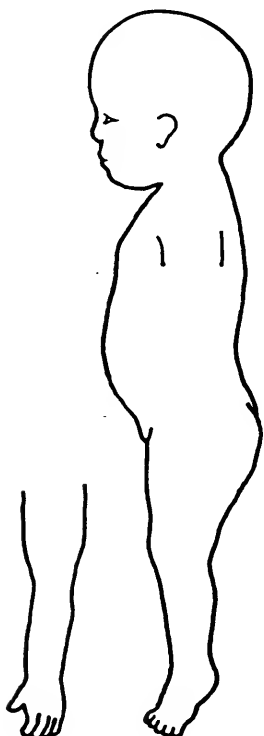
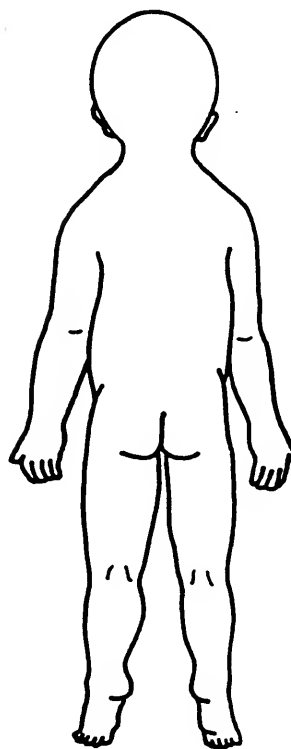
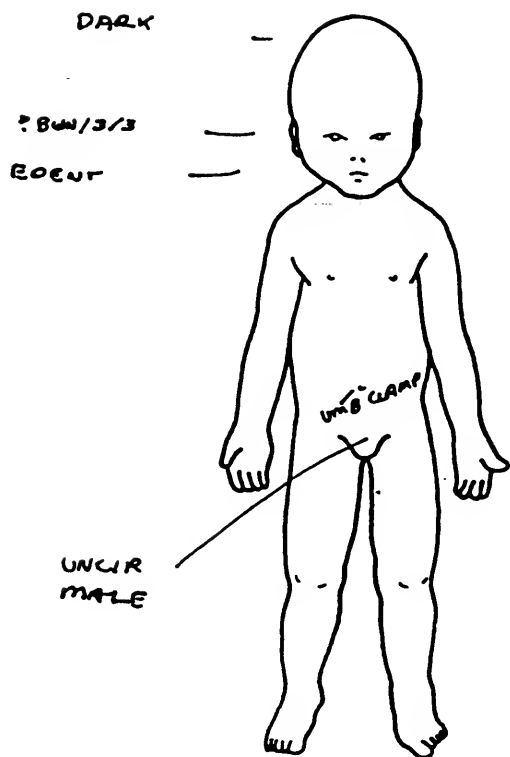
**AUTOPSY NO.**

**CASE NO.**

=====

Multiple sections of all major organs confirm the gross impression and add nothing to the diagnosis. No evidence of natural disease is seen.

INFANT – VENTRAL, DORSAL, AND LEFT AND RIGHT LATERAL VIEWS



Name \_\_\_\_\_

2.2k  
17.5"

Case No. \_\_\_\_\_

Date \_\_\_\_\_

BEST AVAILABLE

OFFICE USE ONLY

Re. 2 Co. \_\_\_\_\_

I hereby certify that this is a true and correct copy of the original document. Valid only when copy bears imprint of the office seal.

By \_\_\_\_\_

Date \_\_\_\_\_

## REPORT OF LABORATORY ANALYSIS

NAME:

LABORATORY NO.

MATERIAL SUBMITTED:

Blood, Liver

DATE RECEIVED:

CASE NO.:

SUBMITTED BY: \_\_\_\_\_

MEDICAL EXAMINER: \_\_\_\_\_

RESULTS:

BLOOD: (Heart)

Ethyl Alcohol - Negative

\_\_\_\_\_  
DATE

Please Note: Unless notified in writing to the contrary, the specimen(s) submitted in this case will be discarded at the end of 60 days.



**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE RIGHT FRONT PASSENGER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT ASSESSMENT FORM

BEST AVAILABLE

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9623

3. Vehicle Number

01

4. Occupant Number

02

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

20

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

5

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

160

Code actual height to the nearest  
centimeter.

(999) Unknown

63 inches X 2.54 = 160 centimeters

8. Occupant's Weight

067

Code actual weight to the nearest  
kilogram.

(999) Unknown

147 pounds X .4536 = 66<sup>68</sup> kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

13

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

9

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with

another occupant or to look out a rear

window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in

front of seat

(8) Other abnormal posture (specify):

(9) Unknown

**EJECTION/ENTRAPMENT****12. Ejection**

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0**13. Ejection Area**

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0**14. Ejection Medium**

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

0**15. Medium Status (Immediately Prior To Impact)**

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0**16. Entrapment**

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0**17. Occupant Mobility**

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

1

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 3

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 03

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 0

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 1

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 1

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 2

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 1

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 1

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 4

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☐ Unknown if belt used

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30. Frontal Air Bag System Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_

- (6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0 0 0

(\_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(\_996) Deployment, unknown longitudinal Delta V

(\_997) Not deployed

(\_998) Unknown if deployed

(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 0 0

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown



**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 0 0  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

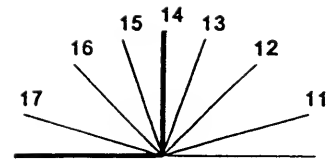
49. Head Restraint Type/Damage by Occupant at This Occupant Position 1  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 2  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 3  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
*Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 2 1

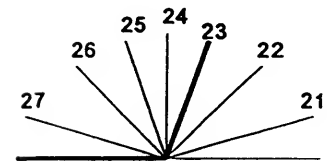
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

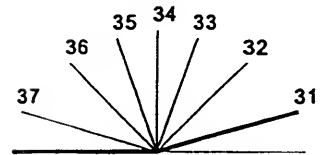
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 3

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): folding locks  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

64. Hospital Stay 08

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 61

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 07

7 Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 02

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 2

- (1) No - blood not given  
(2) Yes - blood given  
(specify units): 6 PRBC  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 11

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

Base Excess -19

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 1

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**CASE VEHICLE RIGHT FRONT PASSENGER**





BEST AVAILABLE

U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>9623</u>	4. Occupant Number	<u>02</u>

INJURY DATA													
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.													
A.I.S. - 90													
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number			
Traumatic brain injury	1st	5. <u>2</u>	6. <u>1</u>	7. <u>1</u>	8. <u>52</u>	9. <u>99</u>	10. <u>7</u>	11. <u>0</u>	12. <u>205</u>	13. <u>3</u>	14. <u>1</u>	15. <u>10</u>	
Chest Trauma with tension pneumothoraces	2nd	16. <u>2</u>	17. <u>4</u>	18. <u>4</u>	19. <u>22</u>	20. <u>10</u>	21. <u>5</u>	22. <u>3</u>	23. <u>151</u>	24. <u>1</u>	25. <u>1</u>	26. <u>97</u>	
Ruptured uterus in 3rd trimester	3rd	27. <u>2</u>	28. <u>5</u>	29. <u>4</u>	30. <u>52</u>	31. <u>46</u>	32. <u>5</u>	33. <u>8</u>	34. <u>151</u>	35. <u>1</u>	36. <u>1</u>	37. <u>97</u>	
Contusion head	4th	38. <u>7</u>	39. <u>1</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>1</u>	45. <u>205</u>	46. <u>1</u>	47. <u>1</u>	48. <u>10</u>	
Laceration forehead	5th	49. <u>7</u>	50. <u>2</u>	51. <u>9</u>	52. <u>06</u>	53. <u>00</u>	54. <u>1</u>	55. <u>7</u>	56. <u>602</u>	57. <u>2</u>	58. <u>3</u>	59. <u>00</u>	
Contusion across abdomen	6th	60. <u>7</u>	61. <u>5</u>	62. <u>9</u>	63. <u>04</u>	64. <u>02</u>	65. <u>1</u>	66. <u>8</u>	67. <u>152</u>	68. <u>2</u>	69. <u>1</u>	70. <u>00</u>	
Laceration hand	7th	71. <u>7</u>	72. <u>7</u>	73. <u>9</u>	74. <u>06</u>	75. <u>00</u>	76. <u>1</u>	77. <u>1</u>	78. <u>602</u>	79. <u>2</u>	80. <u>3</u>	81. <u>00</u>	
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>		
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>		
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>		

BEST AVAILABLE

## OCCUPANT INJURY DATA

	Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90		Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
				Specific Anatomic Structure								
11th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	—	— — — —	—	—	— — —

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood (HP, DS)  
GivenUnits = 6  
(LR)

Arterial Blood Gases

pH = 7.03PO<sub>2</sub> = 550PCO<sub>2</sub> = 43HCO<sub>3</sub> = 11.0BE = -19.0

OVER

10/9

1736

(LR)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

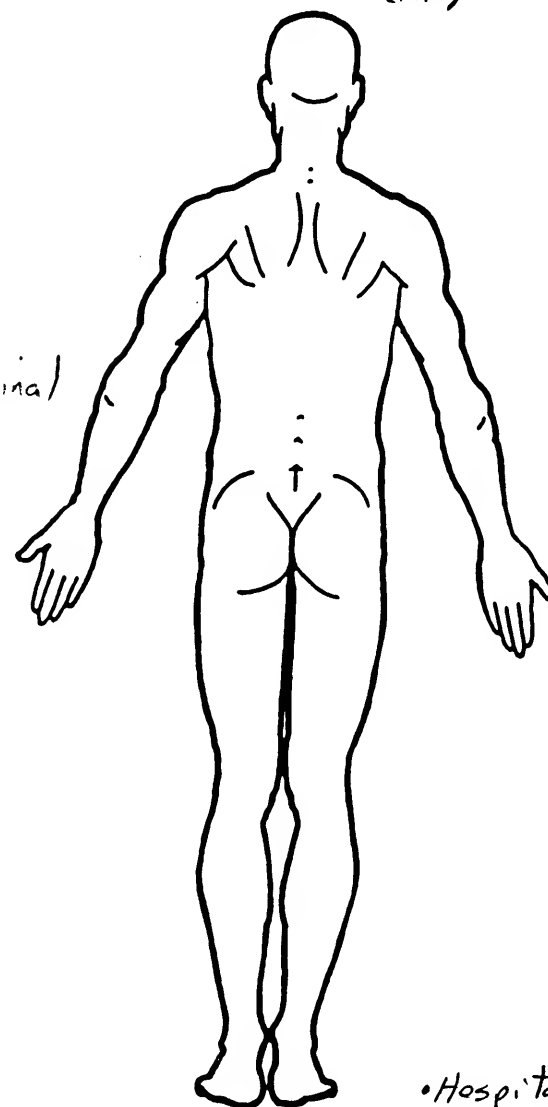
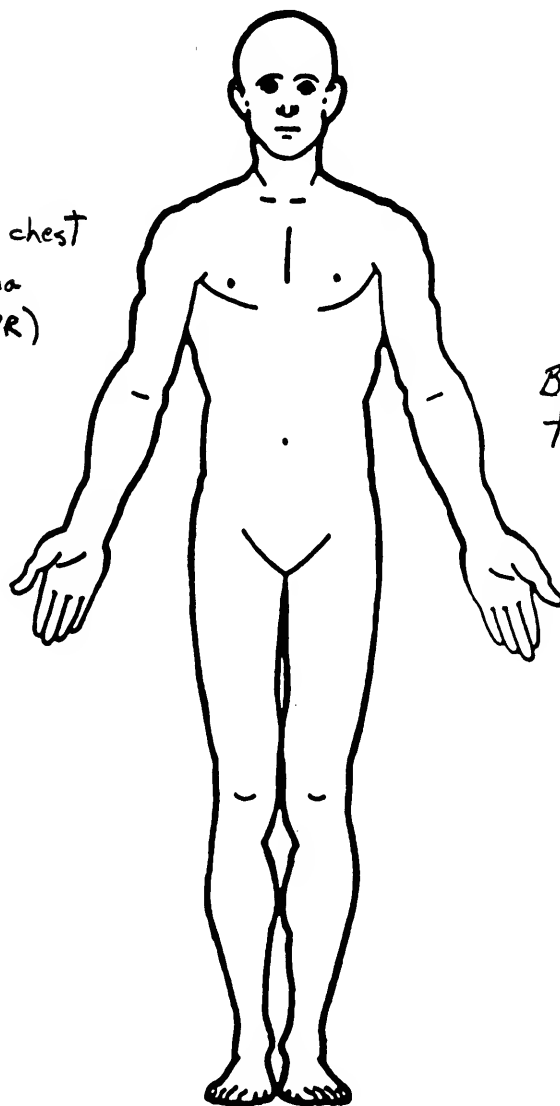
• Head is normocephalic,  
atraumatic (CN)

• No obvious signs of  
external head trauma  
(HP)

• Blunt chest  
trauma  
(CN, PR)

Blunt abdominal  
trauma  
(CN, PR)

• Hospitalized 8  
days (DS)



## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region

## Type of Anatomic Structure

- (1) Whole Area  
(2) Vessels  
(3) Nerves  
(4) Organs (includes Muscles/ligaments)  
(5) Skeletal (includes joints)  
(6) Head - LOC  
(9) Skin

Whole Area

- (02) Skin - Abrasion  
(04) Skin - Contusion  
(06) Skin - Laceration  
(08) Skin - Avulsion  
(10) Amputation  
(20) Burn  
(30) Crush  
(40) Degloving  
(50) Injury - NFS  
(90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC

- (04) Level  
(06) of  
(08) Consciousness

- (10) Concussion

Spine

- (02) Cervical  
(04) Thoracic  
(06) Lumbar

## Abbreviated Injury Scale

- (1) Minor Injury  
(2) Moderate Injury  
(3) Serious Injury  
(4) Severe Injury  
(5) Critical Injury  
(6) Maximum (untreatable)  
(7) Injured, unknown severity

	10/12	10/13	10/14
ph	7.41	7.60	7.52
P <sub>O2</sub>	138	136	92
PCO <sub>2</sub>	46	34	30
HCO <sub>3</sub>	28.7	33.8	24.9
BE	+4.5	+13.2	+3.6

(LR)

## SOURCE OF INJURY DATA

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records  
(2) Hospital/medical records other than emergency room (e.g., discharge summary)  
(3) Emergency room records only (including associated X-rays or other lab reports)  
(4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report  
(6) E.M.S. personnel  
(7) Interviewee  
(8) Other source (specify):  
(9) Police

INJURY SOURCE  
CONFIDENCE LEVEL

- (1) Certain  
(2) Probable  
(3) Possible  
(9) Unknown

(LR)

	10/9				10/10				
	18:25	19:30	20:23	05:00	0:956	10:19	11:02	11:36	12:39
ph	7.08	7.21	7.28	7.40	7.25	7.38	7.36	7.34	7.36
P <sub>O2</sub>	63	230	348	193	37	175	165	148	108
PCO <sub>2</sub>	56	42	36	26	39	28	29	30	30
HCO <sub>3</sub>	16.6	17.0	16.8	16.1	17.0	16.0	16.0	16.0	17.0
BE	-14.2	-11.3	-8.8	-6.3	-10.0	-9.0	-9.0	-9.0	-9.0

(CN)

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury  
(2) Indirect contact injury  
(3) Noncontact injury  
(7) Injured, unknown source

## OFFICIAL INJURY DATA — SKELETAL INJURIES

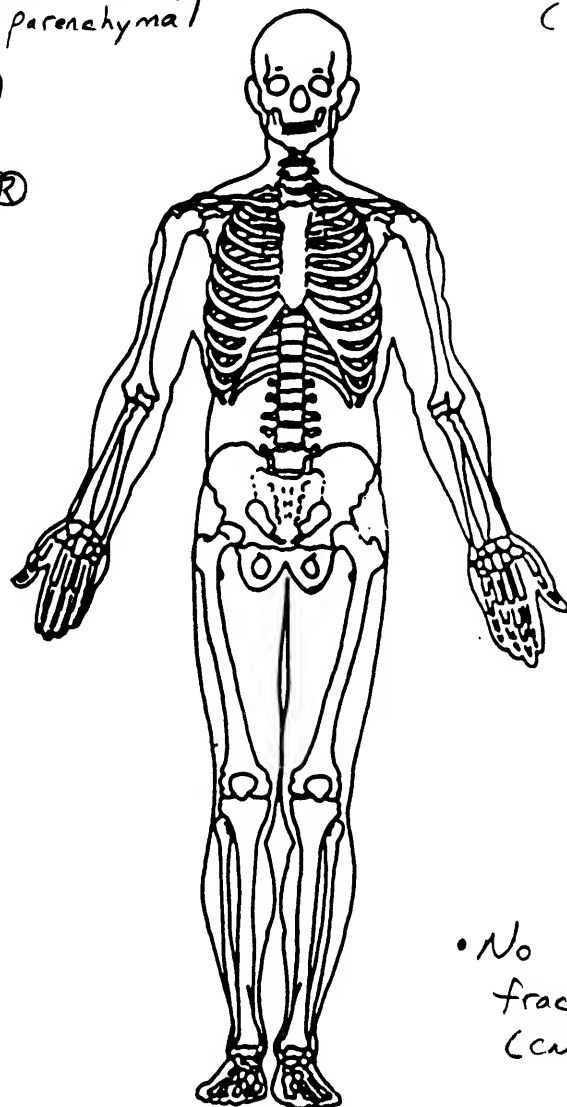
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

- CAT Brain: no evidence of intracranial bleeds, contusion, or parenchymal edema (PX1)

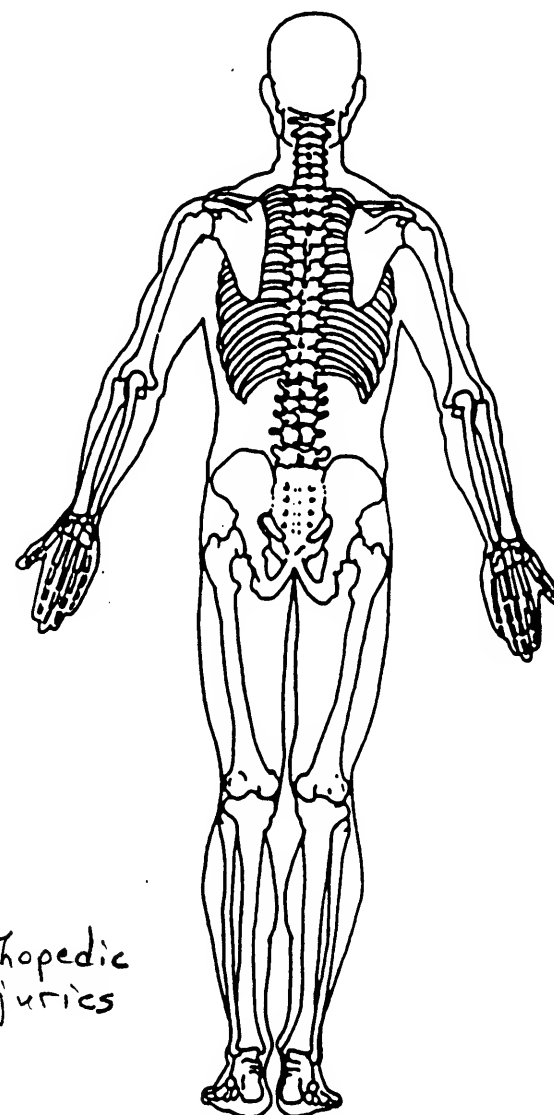
- C-Spine: normal (EX4)

Chest:

- No air leak on (R)  
Air leak on (L)  
(CW)



- No obvious orthopedic fractures or injuries (CW)



## INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify):

(019) Other front object (specify):

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify):
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify):
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify):
- (155) Head restraint system
- (160) Other occupants (specify):
- (161) Interior loose objects
- (162) Child safety seat (specify):
- (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify)

(195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts. (specify):
- (409) Additional or relocated switches. (specify):

(410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify):

## EXTERIOR OF OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify):

(454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify):
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify):
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify):
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify):
- (599) Unknown vehicle or object

## NONCONTACT INJURY

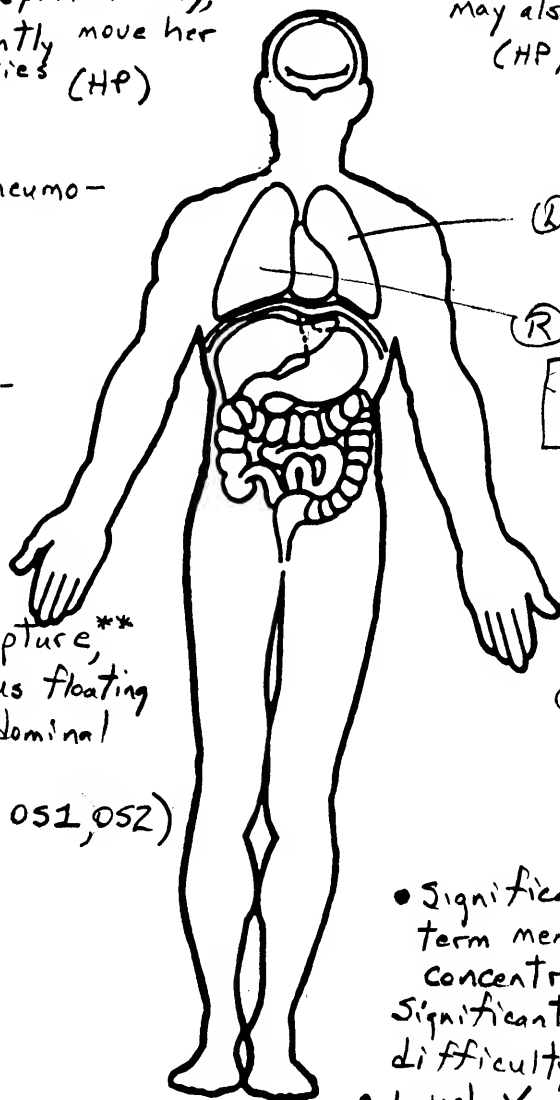
- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify):
- (604) Air bag exhaust gases
- (697) Injured, unknown source



## OFFICIAL INJURY DATA — INTERNAL INJURIES

- Brought to ER in unconscious state (HP, DS, OS1)  
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)
- In shock (OS1)
- Fetus (3rd trimester) delivered by cesarean section with faint heart beat (HP, OS1)
- No apparent response to painful stimuli, but was seen to spontaneously, intermittently move her extremities (HP)
- Possible brain stem concussion with transient LOC — hypovolemia may also have definitely contributed (HP, DS)
- Pupils: large but reactive + equal (HP)

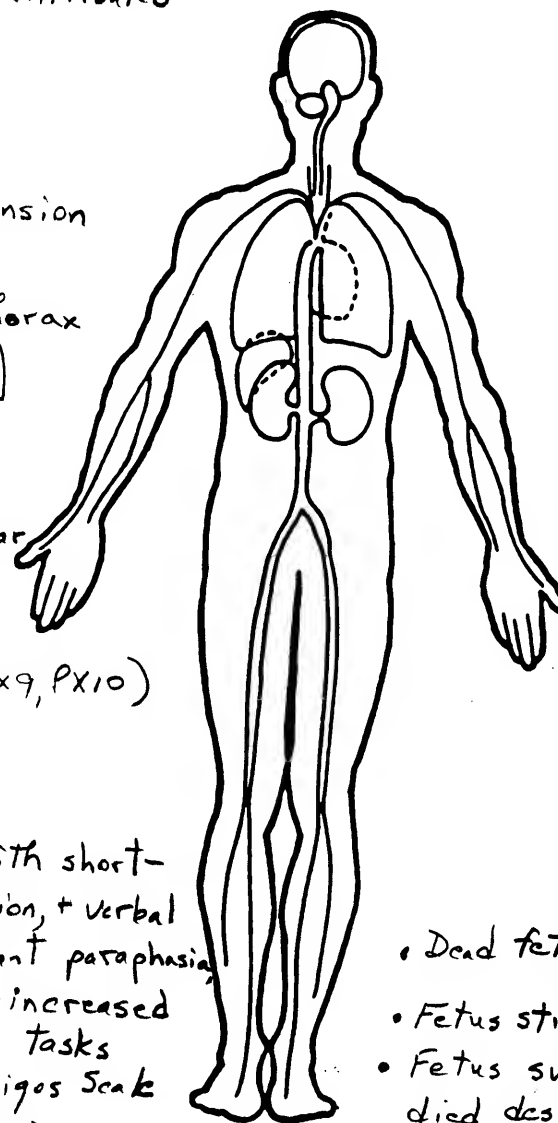
- Bilateral pneumothoraces (CV)
- Massive\* intra-abdominal hemorrhage (DS, OS1, OS2)
- Uterine rupture,\*\* large — fetus floating freely in abdominal cavity (HP, DS, CV, OS1, OS2)



- ② pneumothorax, tension (HP, DS)
- ③ tension pneumothorax [CV, OS1, OS3, EX1, EX2, PX4, PX5]

- Probable bibasilar (lung) contusion and atelectasis (PX5, PX6, PX8, PX9, PX10)

- Significant difficulty with short-term memory, verbal attention, + verbal concentration. Significant paraphasia. Significant disorientation + increased difficulty with functional tasks
- Level V on Rancho Los Amigos Scale of Cognitive Function (PR)



- Dead fetus (CV, PR)
- Fetus stillborn (DS)
- Fetus subsequently died despite resuscitation efforts (HP)

\* .3-.4 liters (OS2)  
\*\* Ruptured fundus (OS1, OS2)

# CAUSE OF DEATH

BEST AVAILABLE

## ICD-9-CM

### OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

### MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy—medical information based upon an invasive examination of a body
ME	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
FX	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
FN	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report—where the author of this information is undefined
EN	Emergency room nurse—"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records—taken during the patients stay in the emergency room
CV	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

PR = Progress Report  
 TC = Transfusion Consultation

DATE:

REASON FOR ADMISSION:

This is a narrative dictation of an encounter of  
 was brought to the after a  
 major motor vehicle accident. The history from the obtained  
 subsequently reveals that this young lady and another pregnant girl were  
 riding in the vehicle and lost control, perhaps from another near encounter  
 with a vehicle, causing them to cross the median and their car spun around  
 backwards and was struck in the rear by another vehicle traveling towards  
 them in the left-hand lane. was brought to the emergency department  
 by ambulance in an unconscious state and was unable to give any further  
 history and was taken immediately to the treatment room where I was  
 summoned. The patient had a cervical collar of the type  
 applied and was noted to be markedly tachypneic. As I recall, her blood  
 pressure was approximately 105 systolic with a heart rate of just over 100  
 with a respiratory rate in the mid-thirties. I do not have the record  
 available at this time for dictation since it is gone to the delivery suite  
 with her and subsequently on to the intensive care unit. In any event, the  
 rest of the general examination revealed no obvious signs of external head  
 trauma. The pupils were large but reactive and equal. The patient did not  
 appear to make any response to painful stimuli but was seen to spontaneously  
 intermittently move her extremities. Her heart was regular in rate. Her  
 lungs were clear. Initially her abdomen revealed a fundal height of third  
 trimester and the lower uterine segment and abdomen were soft. Initially no  
 vaginal bleeding was seen and we heard what we thought were fetal heart  
 tones of about 148; although, these certainly could have been transmitted  
 patient sounds. At that point in time, the extremity examination was  
 completed showing no deformities and the neurologic examination is as noted  
 above. As we were proceeding the patient's initial trauma survey, it became  
 obvious that she would need to be intubated and, that even though she had a  
 line present a central line should be placed because the patient appeared to  
 have suffered from multiple trauma and we were suspicious of major  
 obstetrical injury, in view of the fact that her vital signs were beginning  
 to worsen with some diminution in her systolic pressure and tachycardia  
 developing. At that time, I continued to protect the patient's airway and  
 kept her oral pharynx suctioned free of vomitus, while  
 placed a subclavian central line on the right. prepared for  
 rapid sequence intubation and the patient was given Xylocaine 100 milligrams  
 and succinylcholine chloride 100 milligrams intravenously. Following  
 suitable muscle relaxation, was able to oral-tracheally intubate

CONTINUED

the patient without difficulty. The patient had good breath sounds bilaterally and was then supported by bag and mask ventilation. At that point in time, it was obvious that her status was changing rapidly. Her abdominal girth was increasing and her lower abdomen became very rigid and it was obvious that she had free intraperitoneal hemorrhage evolving. An initial attempt to place a left subclavian line by \_\_\_\_\_ was discontinued because of the urgency to take the patient directly to the

At this time the patient was receiving high-volume O-negative blood through the right subclavian placed earlier by \_\_\_\_\_ and this line was patent and we were able to give large volumes of blood and fluid to support the patient's vital signs. During that period of time, we had consulted over the phone with \_\_\_\_\_, who was about 20 minutes away and so we paged and found that \_\_\_\_\_ was in the delivery suite preparing to do a delivery and he consented to take the patient straight in for an emergency cesarean section. \_\_\_\_\_ had also been paged and

she came straight to the operating room to assist. \_\_\_\_\_ responded to an any-general-surgeon page, presented to the emergency department, observed the resuscitation and accompanied the patient to the delivery room. Once there, an emergency cesarean section was begun and rapidly an infant, near-term size, was delivered who had a very faint heart beat and was apneic. Immediately resuscitation was started by

\_\_\_\_\_ and his \_\_\_\_\_ to no avail and the baby eventually was pronounced dead in the delivery suite after a thorough resuscitative effort was made. At that time, the patient was noted to have some resistance to ventilation by the anesthesiologist and some indication that there was inadequate ventilation of the left lung including no breath sounds on the left were noted. At that time I empirically placed a #22 chest tube in the anterior axillary line in the nipple line. Following this, we got good flow and bubble into the Thora-Klex unit and breath sounds immediately returned in the left lung confirming the presence of a pneumothorax, perhaps under tension and perhaps secondary to the attempt to place a subclavian line earlier by \_\_\_\_\_ but also simply perhaps due to the blunt chest trauma possibly sustained when the patient was involved in the high velocity motor vehicle accident causing uterine rupture. The initial finding when the patient's abdomen was opened was a large uterine rupture with the fetus floating freely in the abdominal cavity and the placenta had also delivered through the tear in the uterus confirming uterine rupture suspected in the

\_\_\_\_\_ because of the patient's decompensation. Following the cesarean section and its completion and a thorough exploration of her abdomen without other obvious other injury being found by

the cesarean section was completed after repair of her uterine tear and the patient stabilized and began to show signs of improvement and spontaneous extremity movement and received some Fentanyl for sedation at that time by the \_\_\_\_\_ and was subsequently taken to the recovery room, where I understand at this time the patient is now showing signs of

CONTINUED

awakening. has also been consulted by phone and will see the patient. Initially, it was suspected that the patient had a concomitant head injury and, in view of the fact that she seems to be waking up now perhaps she had a brain-stem concussion with transient loss of consciousness but certainly the hypovolemia may have also definitely contributed to this. In any event, it appears that without complication, that the mother may survive following the unfortunate demise of her fetus due to blunt trauma and uterine rupture.

**DIAGNOSIS:**

1. Blunt abdominal trauma with uterine rupture and fetal demise.
  2. Possible brain stem concussion with transient loss of consciousness.
  3. Left pneumothorax developed intraoperatively, possibly under tension, treated by chest tube placed by me in the delivery suite during the cesarean section.
-

ADMISSION DATE:

DISCHARGE DATE:

ADMISSION DIAGNOSES:

- (1) Massive motor vehicle accident.
- (2) Blunt abdominal trauma with uterine rupture.
- (3) Possible brain stem concussion with loss of consciousness.
- (4) Left pneumothorax tension.

PROCEDURES DURING THE HOSPITALIZATION:

- (1) Placement of subclavian catheter.
- (2) Mechanical ventilation.
- (3) Placement of chest tubes bilaterally.
- (4) Emergent laparotomy.
- (5) Repair of massive uterine rupture.
- (6) Transfusion of packed red blood cells, secondary to motor vehicle accident.

CLINICAL SUMMARY:

The patient is a 20-year-old single white female gravida 2, para 1, who was admitted through the \_\_\_\_\_ on \_\_\_\_\_ with loss of consciousness secondary to a significant motor vehicle accident. While she was being stabilized in the \_\_\_\_\_ she was noted to become hypotensive and begin to deteriorate, suspicion of intra-abdominal bleeding was entertained by the \_\_\_\_\_ and she was brought immediately to labor and delivery after stabilization to the best of their ability. Upon presentation to labor and delivery the patient was hypotensive, was definitely intubated, was received by \_\_\_\_\_ placed on a ventilator, and at that time due to continued hypotension and suspicion for intra-abdominal bleeding it was opted to proceed with an emergency laparotomy. This is dictated. The findings of the laparotomy revealed a massive intra-abdominal hemorrhage and large uterine rupture which exuded the fetus into the abdominal cavity, a placental separation. The baby was stillborn upon delivery. After repair of the uterine laceration and transfusion the patient did stabilize. Her laparotomy went without incident. Intraoperatively, however the patient was noted to be difficult to ventilate and was thought to have a tension pneumothorax. A chest tube was placed by \_\_\_\_\_ Pulmonary and neurosurgical consults were

CONTINUED



obtained. She was supported, placed on H-2 blockers. She stabilized over the course of the next 24 hours, began moving all extremities on the Her lines were in place.

Chest x-ray revealed no pneumothorax and her laboratory was stable. She was on 50 percent on her ventilator and had good blood gases, and had significant improvement over the course of that first 24 hours. Her uterine and pelvic examination were unremarkable.

On the second postpartum day with social services intervening the patient continued to improve. She opened her eyes and began to move all of her extremities. She was sedated with Buprenex but per her families request this decreased as they were concerned over her level of sedation. Her nasogastric tube was clamped and removed on the She continued to improve.

On the the patient was more alert, active, somewhat improved responsiveness. Her chest x-ray was improving. She did have mild respiratory distress suspected from atelectasis but she was extubated. She responded to voice commands.

By the she was quite neurologically stable and continued to improve with regard to her neurologic status. Very poor pulmonary toilet was noted by the pulmonologist but she was tolerating oral feedings and taking some liquids. By the her incision was clean and dry.

On the the patient continued to stabilize was anemic and was transfused, had been extubated and were moving the ~~baby~~ <sup>patient</sup> to the floor and her chest tubes were removed. Physical therapy was initiated and talk of long-term rehabilitation was initiated with the neuro nurse case manager. She was going to go to for She looked extremely good at the time of discharge regarding her vital signs. She was aware of the loss of her baby.

She was discharged to home on iron and prenatal vitamins. Her family was very reluctant for her to have pain medication at that time. I have asked to see the patient in follow-up in approximately two weeks for examination of her incision. Her family will contact us prior to that time should she have any difficulty.

CONTINUED

DISPOSITION:

To \_\_\_\_\_ in the care of neurology, will follow  
to be sure the patient postoperatively recovers.

DATE:

REASON FOR CONSULTATION:

Postoperative respiratory management.

The patient is a 20-year-old white female who is eight months pregnant, and involved in a motor vehicle accident earlier today in which she sustained blunt chest trauma, blunt abdominal trauma, and rupture of her uterus. She was taken to the \_\_\_\_\_ where she was found to have a ruptured uterus with apparently a dead fetus. She had uterine repair as well as exploratory laparotomy. She was also noted to have bilateral pneumothoraces and had chest tubes placed.

According to the family, the patient is a nonsmoker, has had no history of hospitalizations or \_\_\_\_\_ treatments or respiratory problems. She is not chronically on any respiratory medications and has no wheezing, coughing, sputum production, shortness of breath or dyspnea on exertion.

PAST MEDICAL HISTORY:

SURGERY: Tonsillectomy. MEDICAL HOSPITALIZATIONS: None. CHILDHOOD ILLNESSES: No asthma, tuberculosis, rheumatic fever or polio. ADULT ILLNESSES: No hypertension, diabetes, epilepsy, goiter, gout, glaucoma, renal problems, rheumatologic disorders, yellow jaundice, hepatitis, ulcers, asthma, tuberculosis, pneumonia, angina, heart attack, heart failure, strokes, cancer, kidney stones, lupus, diverticulitis, or phlebitis.

DRUG ALLERGIES:

None.

MEDICATIONS: (Prior to admission)

Multi-vitamins and iron.

FAMILY HISTORY:

Positive for diabetes.

SOCIAL HISTORY:

She is single. She is not married. She lives in \_\_\_\_\_ Smoking history - none. Alcohol intake - none. Drug use - none. Work history - she supports herself by babysitting.

CONTINUED

**PHYSICAL EXAMINATION:**

**VITAL SIGNS:** Currently her blood pressure is running around 110/60, pulse is running around 120, respiratory rate is 14, not assisting the ventilator.

**GENERAL:** A well-developed white female, still deeply sedated.

**SKIN:** Warm and dry without petechia or icterus. No livedo reticularis.

**HEENT:** Head is normocephalic, atraumatic. Pupils are miotic but reactive.

Conjunctivae and sclerae are clear. She does not have dolls eyes. The nasopharynx reveals an nasogastric tube. Oropharynx - endotracheal tube.

**NECK:** No subcutaneous air, no bruits.

**CHEST:** No crepitation, no paradoxical movement, coarse, wet rhonchi in all lung fields. She has bilateral chest tubes. No air leak on the right. Air leak on the left.

**HEART:** Rapid regular rhythm. Negative Hamman's sign. No S3 gallop.

**ABDOMEN:** The abdomen is postoperative with surgical dressing. It is soft.

**EXTREMITIES:** No obvious orthopedic fractures or injuries. No major lacerations. No cyanosis, clubbing or edema. No obvious deep venous thrombosis.

**NEUROLOGICAL:** She is deeply sedated and largely flaccid.

**LABORATORY DATA:**

Her initial chest x-ray, 18:15, shows a left chest tube, endotracheal tube - a little bit too low, nasogastric tube - a little bit too high, and there is a right tension pneumothorax as well as a CVP on the right. The ribs and clavicles look intact. Follow up film at 18:45 now shows a right chest tube in place, mediastinum is shifted back to the midline. The pneumothorax is evacuated. There is a little bit of left lower lobe atelectasis in retrocardiac region, but otherwise the lung fields are largely clear.

Her white count is 38,000, hematocrit 35% with a platelet count of 128,000. Her initial blood gases showed pH of 7.21. pCO2 43, pO2 230, with a bicarbonate of 17 on 100% oxygen. Subsequently, I have decreased the FI02, increased the tidal volume and the rate and repeat blood gases are pending. Her sodium is 140, potassium 4.8, chloride 116, bicarbonate 18, BUN 14, creatinine 1, glucose is 170.

**IMPRESSION:**

1. Status post motor vehicle accident.
2. Status post exploratory laparotomy.
3. Status post ruptured uterus with uterine repair.
4. Status post bilateral chest tubes with a tension pneumothorax on the right. She still has a persistent air leak on the left.
5. Status post blunt chest trauma.

**PLAN:**

1. Will continue ventilatory support for now.

CONTINUED

2. Will proceed with a neurologic evaluation. Once the patient is stabilized she will be going to CAT for CT scan of her head.
3. H2 blockers for stress ulcer prophylaxis.

Thank you very much for this consultation. Will follow with you.

## PROGRESS REPORT

### Acute Brain Injury Rehabilitation Team Evaluation

#### REFERRING PHYSICIAN:

The Acute Brain Injury Team met on \_\_\_\_\_ following a referral through \_\_\_\_\_. The patient had previously been evaluated by the speech pathologist, physical therapist, and occupational therapist and the family had been interviewed by the social worker. Present at the meeting were:

Findings and recommendations were discussed and goals mutually agreed upon. See individual therapists' reports in rehabilitation section.

HISTORY: \_\_\_\_\_ was involved in a motor vehicle accident on \_\_\_\_\_ with blunt abdominal and chest trauma. At that time she lost her full-term infant son,

\_\_\_\_\_ is a single 20 year old living independently in \_\_\_\_\_. Her family is involved in her life and \_\_\_\_\_ currently attends \_\_\_\_\_ where she is taking aviation courses. Currently \_\_\_\_\_ supports herself with babysitting and hopes to open a day care center in her home.

COMMUNICATION AND COGNITION: \_\_\_\_\_ participated in the Brief Test of Head Injury with mild impairments. She demonstrates, however, a significant difficulty with short-term memory, with verbal attention, and with verbal concentration. She initially demonstrated some significant paraphasia and jargonistic productions but currently demonstrates a mild dysnomia for naming activities. \_\_\_\_\_ is cooperative but does demonstrate significant disorientation and increased difficulty with functional tasks involving processing of multiple modalities and information sources.

MOBILITY AND SENSORY FUNCTION: Currently \_\_\_\_\_ demonstrates impulsivity in behaviors with balance at a poor+ level. Currently she can ambulate 20 feet with hand-held to moderate assist of two. She does transfer from supine to sit and sit to stand with minimal to moderate assist of one. It should be noted that \_\_\_\_\_ mobility is currently hampered by chest tube connection. She also demonstrates significant variability with her status and the amount of stimulation she has received.

SELF CARE: \_\_\_\_\_ currently requires moderate assist of one and verbal cues for basic ADL tasks. She demonstrates perseveration and decreased attention and processing with functional activities for self care. She demonstrates no awareness for tubes, lines, and other safety issues.



## PROGRESS REPORT

### Acute Brain Injury Rehabilitation Team Evaluation Page 2

**SWALLOWING AND NUTRITION:** Currently is on a general diet and taking meals without significant difficulty. She has been noted to have some coughing and difficulty with thin liquids via straw but tolerates these well with cup drink. Signs have been posted and staff has been notified.

**NURSING ISSUES:** Physicians plan removal of right chest tube. Currently pain management is a concern with being extremely sensitive to pain medications. Nursing will attempt to control pain while maintaining maximum cognitive function.

**FAMILY ISSUES:** family has expressed appropriate concern regarding her condition and have spent a great deal of time in exploring ways to handle loss. They have provided information to regarding her son's death and plan a funeral in the immediate future. They wish to maintain confidentiality regarding status in the hospital and wish to assist in her rehabilitation efforts.

### **IMPRESSIONS AND RECOMMENDATIONS:**

At this time presents at a Level V on the of Cognitive Function. She currently is confused and inappropriate without significant structure to activity. She performs better with single modality tasks such as pure verbal problem solving. When asked to process maximum information and initiate tasks independently her performance is significantly decreased. does continue to demonstrate behavioral characteristics such as impulsivity and decreased awareness of medical status which do put her at increased risk for safety judgment.

At this time we recommend 24 hour supervision for regarding safety issues in daily care. We do recommend that she continue with inpatient rehabilitation to meet supervisory needs and to provide a structured cognitive rehab program to increase her safety with ambulation and activities of daily living and to improve memory and attention skill to return to an independent and safe living environment. Appropriate placement and referral for inpatient rehabilitation services will be pursued by the Team.

Pending discharge plans it is recommended that the patient be seen twice daily by physical therapy, occupational therapy, and speech pathology services to address the following goals: 1. decrease confusion stemming from the external environment, 2. increase appropriate interactions by improving cognitive abilities; by refining frequency rate, quality, and duration of appropriate responses, 3. promote maximal physical function and psychological adaptation for safety issues, and

## PROGRESS REPORT

96    Acute Brain Injury Rehabilitation Team Evaluation    Page 3

4. channel improving abilities into functional activities gradually increasing the patient's purposeful participation and decreasing structure. Family has been educated regarding                    ; status and regarding Team recommendations. Involvement of the family in the rehab process and continuing education of them is anticipated. The team will reconvene as needed to assist with further decision making.

\_\_\_\_\_  
Physical Therapy

\_\_\_\_\_  
Occupational Therapy

\_\_\_\_\_  
Kendra Klutsenbaker, Speech Pathology

\_\_\_\_\_  
, Nurse Case Manager

\_\_\_\_\_  
Social Worker

## OPERATION REPORT

DATE:

96

PREOPERATIVE DIAGNOSIS:

POSTOPERATIVE DIAGNOSIS:

OPERATION:

Exploratory laparotomy at the time of emergency delivery from ruptured uterus.

SURGEON:

ANESTHESIOLOGISTS:

- 1.
- 2.

This was a 20-year-old female, involved in a motor vehicle accident. She arrived in the emergency room unconscious. She was at term pregnancy, and was having vaginal bleeding with rapid expansion of her abdominal girth. She was in shock and was unconscious. She was taken to the Cesarean section delivery room, where                      and                      opened the abdomen. The baby and the placenta were both outside the uterus in the abdominal cavity, along with a large amount of blood. The patient had a ruptured fundus of the uterus. After delivery of the baby and placenta, and repair of the uterus by                      and                      exploration of the abdomen revealed both diaphragms to be intact. The liver was felt to be normal, with no fractures. The spleen was small-sized, and no fractures were palpable. The pancreas was normal to palpation throughout its entire length. The small bowel was examined from the ligament of Treitz to the ileocecal junction. There were no defects in the mesentery or injuries to the bowel.\

The abdomen was irrigated with a large amount of warm saline, and was closed in layers by                      The patient subsequently required placement of a right chest tube for tension pneumothorax.

CONTINUED

# OPERATION REPORT

The patient tolerated the procedure. The patient was taken to the recovery area in poor condition.

---

96  
96

## OPERATION REPORT

DATE:

96

PREOPERATIVE DIAGNOSIS:

POSTOPERATIVE DIAGNOSIS:

OPERATION:

Emergent laparotomy.

Delivery of fetus.

Repair of massive uterine rupture.

SURGEON:

The patient was brought to the operating room by \_\_\_\_\_ and I had been summoned emergently from my office to stand-by for an emergency. Upon the patient arriving to the operating room, I talked to \_\_\_\_\_. He thought the patient's condition was very precarious and her chance for survival was small. They thought they heard heart tones in the emergency room; therefore, he was requesting us to perform an emergency cesarean section in an effort to save the baby prior to the mother's demise. The mother was being attended to by \_\_\_\_\_ who intubated her, who placed her on a ventilator, did obtain a blood pressure and very quickly an emergent cesarean section was undertaken by myself and \_\_\_\_\_.

After prep, drape, a vertical incision was made in the abdomen through the subcutaneous tissue, level of fascia which was resected superiorly and inferiorly. The peritoneum was opened quickly. Immediately, several liters of blood exuded from the patient's peritoneal cavity. A baby's head was felt within the abdomen. The baby was delivered with pressure on the upper abdomen and was noted to be delivered and attached to the placenta, which also was exuded from the uterine cavity. Clamping and cutting of the cord was accomplished quickly and the baby was handed to a neonatologist. The baby had Apgars of zero and zero. The placenta was approximately 20 to 30 percent attached to the uterine fundus. The uterus was elevated. There was known to be a large laceration through this complete fundus of the uterus from the right fallopian tube to the area approximately a centimeter proximal to the left fallopian tube. A large laceration was noted posteriorly in the uterus too, approximately three centimeters in size.

CONTINUED

## OPERATION REPORT

Very quickly the incision was closed with running, locking stitches 0-Chromic. The second layer was added for hemostasis. After closure of the incisions, the patient started to stabilize. Apparently her blood loss was decreasing dramatically and, with infusion of blood by                      and with controlling of the bleeding, the patient began to stabilize. The laceration of the posterior uterine wall was repaired in two layers in the usual fashion per hemostasis. There was noted to be some continued bleeding from hypotonic uterine inertia. She was therefore given Hemabate for hemostasis. Copious irrigation of the abdominal cavity was accomplished and again, several liters of blood were removed.                      then scrubbed in to perform exsufflation of the abdomen and assisted with closure of the abdominal wall. His portion of this surgery will be dictated separately. Both ovaries and fallopian tubes did appear normal. The uterus at the conclusion of the repair appeared basically normal with the exception of its atony. It did respond to massage and Hemabate however. The abdomen was then closed after                      performed his manual exploration in interrupted figure-of-eight 0-Vicryl fashion. The subcutaneous tissue was closed with interrupted single stitches of 2-0 chromic and the skin was then closed with skin clips. The estimated blood loss from the operative procedure was difficult to quantitate due to the large amount of blood within the abdomen but, again, there were at least three to four liters of blood within the patient's abdomen and active bleeding was encountered at the time of surgery with an estimated intraoperative blood loss of approximately 500 cubic centimeters. The patient was in stable condition and was left in the care of                      who was transferring her to the intensive care unit and

POSTOPERATIVE CONDITION:  
Stable condition.



## OPERATION REPORT

DATE:

96

PREOPERATIVE DIAGNOSIS:

Right pneumothorax.

POSTOPERATIVE DIAGNOSIS:

Right pneumothorax.

OPERATION:

Replacement of right chest tube under local anesthesia.

SURGEON:

ANESTHESIOLOGIST:

Local, with 10 cc of 1% Xylocaine.

DESCRIPTION OF PROCEDURE:

After explaining the procedure of replacement of right chest tube to both parents, including the risks and complications, the right chest was prepped with Betadine soap and solution and draped in sterile fashion. Ten cubic centimeters of 1% Xylocaine was used to infiltrate the subcuticular skin and muscle. A #28 chest tube with trocar was placed through the previous thoracotomy incision and placed into the right chest. Bubbling was present on initial entry for about five minutes, until the residual pneumothorax cleared. Breath sounds improved following placement of the chest tube and the chest tube was then sutured in its place with interrupted 2-0 silk suture. Vaseline dressing and 4 x 4s and Ten Inch silk tape were then applied. The patient tolerated the procedure well. Breath sounds were present bilaterally at conclusion of the procedure, and a portable chest x-ray for chest tube placement was ordered.

---

# TRANSFUSION MEDICINE CONSULTATION

\*\*\*\*\*  
 NAME: BILL#: PATH#:  
 MRNO: D.O.B.: '76 AGE: SEX: F I/O: ROOM:  
 \*\*\*\*\*  
 SPECIMEN RECEIVED: 96 PHYSICIAN:

REPORT FOR: TRANSFUSION REACTION STUDY

## COMMENT:

### VITAL SIGNS:

	PRE-1600	POST-2000
Temperature:	99.3	100.6
Blood Pressure:	116/57	144/87
Pulse:	104	113
Respirations:	17	27

The patient received one unit of packed red cells  
 The patient received 400cc with the transfusion starting at 1645 and reaction starting at 2130 including rash and elevated temperature. The laboratory was notified at 2140. The patient has had previous transfusions with no previous reactions noted. The patient's diagnosis was motor vehicle accident with loss of fetus and C-section. The patient received 25mg of benadryl. Vital signs are noted above. In the Laboratory the serum was yellow clear and negative for laboratory tests of reaction including a negative pre and post direct Coombs. No indication of hemolytic transfusion reaction was notified to the floor at 2317. had reviewed this case and indicated no evidence of hemolytic transfusion reaction. With the presentation of rash this may represent a urticarial reaction but no evidence of hemolytic transfusion reaction is present.

## TRANSFUSION REACTION INVESTIGATION

DOB : 1976  
AGE/SEX : 20 YRS FEMALE  
DR. :

PAT TYPE : IN-PATIENT  
LOCATION :  
DADM/DIS : 96 |

PAT NAME :  
MED REC # :  
ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 1815		

PORTABLE CHEST 1996, 1815 HOURS:

A pneumothorax on the right which is under tension with right to left shift in the mediastinum and secondary atelectasis in portions of the left lower lobe. Endotracheal tube in good position. Chest tube in the left pleural space. Nasogastric tube the distal tip of which is in the distal thoracic esophagus.

REASON FOR EXAM: SOB/DYSPNEA

DICTATED BY:

(Electronic Signature)

TRANSCRIBED: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1801

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : 1976	PAT TYPE : IN-PATIENT	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. :	DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 1845		

Portable chest, 96, 1845 hour:

Chest tube has been placed in the right pleural space and the pneumothorax evacuated. No residual mediastinal shift although there is some residual atelectasis to the posterior medial segment of the left lower lobe. Nasogastric tube has been advanced into the stomach. Central catheter, endotracheal tube and left chest tube remain in good position.

REASON FOR EXAM: CATH/TUBE PLACEMENT

Dictated by:

(Electronic Signature)

Transcribed: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1801

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : 1976	PAT TYPE :	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC # :
DR. :	WADM/DIS : 96   96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CHEST AP	96 1855		

Examination at 1632 hours on 96 demonstrates the inspiratory effort to be poor. The lung fields are clear.

REASON FOR EXAM: SOB/DYSPNEA/DIFFICULT BREATHING/WHEEZING

DICTATED BY:

(Electronic Signature)

TRANSCRIBED: 96

1996

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1804

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : 1976	PAT TYPE :	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. :	MADM/DIS : 96   96	ROOM/BED :

## DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CERVICAL SPINE X-TABLE ONLY	96 1856		

Cross table lateral of the cervical spine. Film was taken at 1612 hours.  
The air filled hypopharynx and larynx and cervical trachea appeared normal.

REASON FOR EXAM: INJURY

DICTATED BY:

(Electronic Signature)

TRANSCRIBED: '96

1996

---

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1804

\*\*\*END OF REPORT\*\*\*

PAGE: 1



DOB : 1976	PAT TYPE : IN-PATIENT	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC # :
DR. :	M.DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CT HEAD (BRAIN) W/O INFUSION	96 2246		

No comparative studies. Contiguous axial images were acquired from base to vertex without the administration of contrast media.

Topogram images show both the nasogastric tube and endotracheal tube in place. The ventricular system and cisterns are normal in size and configuration for patient's age. There are no intra or extra-axial fluid collections. No abnormal region of increased or decreased attenuation. Visualized bony calvarium, facial bones, and orbits are radiographically unremarkable. Minimal layering fluid within the ethmoid and left sphenoid sinus without evidence of bony irregularities. Remainder of the visualized paranasal sinuses are radiographically unremarkable.

IMPRESSION:

1. The patient is status post motor vehicle accident, no evidence of intracranial bleeds, contusion, or parenchymal edema.
2. Ethmoid and sphenoid sinusitis, age indeterminate without evidence of bony abnormalities.

Results of this dictation were called to at 11 PM.

REASON FOR EXAM: HEAD INJURY

DICTATED BY:

M.D.  
(Electronic Signature)

TRANSCRIBED: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1230

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : 1976	PAT TYPE : IN-PATIENT	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. :	M.DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST			

AP supine chest 96 at 0600 hours.

Comparison with 96. Previously described lines and tubes are redemonstrated. Decreasing left basilar infiltrate or atelectasis. No other interval change.

REASON FOR EXAM: PAINFUL RESPIRATION

Dictated by:

(Electronic Signature)

Transcribed: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1801

\*\*\*END OF REPORT\*\*\*

DOB : '1976	PAT TYPE :	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. : ---	M.DADM/DIS : '96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 0636		

PORTABLE CHEST 96 0600 HOURS:

AP erect study at 0600 hours on 96 is compared with prior examinations. Central catheter chest tubes, nasogastric tube, and central catheter remain and the endotracheal tube has been removed. There is still some minimal basilar pleural reaction. The lung fields do not demonstrate significant areas of infiltrate or atelectasis, however.

REASON FOR EXAM: SOB/DYSPNEA

Dictated by:

(Electronic Signature)

Transcribed: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1228

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : 1976	PAT TYPE : IN-PATIENT	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. :	M.DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 1509		

PORTABLE CHEST : 1996, 1500 HOURS:

Nasogastric tube noted extending to the stomach. The right subclavian line extends to the superior vena cava. In the interval since the previous study at '96 at 0600 hours, the right-sided chest tube has been removed. There is a 20 percent pneumothorax now noted on the right. There is increasing bilateral air space pulmonary infiltrate, greatest at the lung bases, which may indicate pulmonary contusion, aspiration, atelectasis, pneumonia, or pulmonary edema.

IMPRESSION:

-1- Right-sided pneumothorax following removal of the right-sided chest tube. Increasing bilateral pulmonary infiltrate. Report called to Dr. Boatman.

REASON FOR EXAM: SOB/DYSPNEA/DIFFICULT BREATHING/WHEEZING

Dictated by:

(Electronic Signature)

Transcribed: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 11OCT96 1801

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB :	1976	PAT TYPE :		PAT NAME :	
AGE/SEX :	20 YRS FEMALE	LOCATION :		MED REC #:	
DR. :		M.DADM/DIS :	96 1	ROOM/BED :	

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 1759		

PORTABLE AP SEMI-UPRIGHT CHEST 96 1815:

Study compared to exam done earlier the same day 1500 hours.

There has been interval placement of a right thoracotomy tube, the tip of which overlies the medial right posterior sixth rib. Pneumothorax is no longer visualized. Minimal bibasilar probable contusion has just partially cleared since the prior study is noted. The chest is also hypoventilated. Right subclavian central line catheter and nasogastric tube are unaltered.

DICTATED BY:

(Electronic Signature)

TRANSCRIBED: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1221

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : '1976	PAT TYPE :	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. :	M.DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 2108		

PORTABLE AP SEMI-UPRIGHT CHEST 96 2035:

Study is compared to 1815 hours.

Tubes and lines are unaltered. Chest remains hypoventilated with bibasilar areas of probable contusion and atelectasis. Again, no pneumothorax was seen.

Dictated by:

(Electronic Signature)

Transcribed: 96

---

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 0812

\*\*\*END OF REPORT\*\*\*



DOB : 1976	PAT TYPE :	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC # :
DR. :	M.DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 1219		

PORTABLE AP SEMIUPRIGHT CHEST 96 0600:

Study compared with exam done the evening before.

Tubes and lines are unaltered. Chest is unchanged.

Dictated by:

(Electronic Signature)

Transcribed: '96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 0812

\*\*\*END OF REPORT\*\*\*

DOB : 1976  
AGE/SEX : 20 YRS FEMALE  
DR. :

PAT TYPE :  
LOCATION :  
M.DADM/DIS : 09OCT96 |

PAT NAME :  
MED REC # :  
ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 0629		

PORTABLE CHEST 96 0600 HOURS:

Comparison 1996 at 0600 hours.

Chest tube, right subclavian line, and nasogastric tube are stable. There is no pneumothorax. Interval changes are primarily related to technique, however, mild bibasilar infiltrates or atelectasis persists. The cardiomeastinal silhouette within limits of normal. The visualized osseous structures are intact.

IMPRESSION:

1. Mild bilateral basilar atelectasis and/or infiltrates unchanged allowing for differences in technique. No pneumothorax.

REASON FOR EXAM: SOB/DYSPNEA

Dictated by:

(Electronic Signature)

Transcribed: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1618

\*\*\*END OF REPORT\*\*\*

DOB : 1976	PAT TYPE :	PAT NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC #:
DR. :	M.DADM/DIS : 96	ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
PORTABLE CHEST	96 0627		

PORTABLE CHEST 96 0600 HOURS:

Compared with 1996 at 0600 hours.

Current study demonstrates better aeration of the lungs. The chest tube, right subclavian line, and nasogastric tube are stable and in good position. There is no pneumothorax. Minimal bibasilar atelectasis and/or infiltrate is identified with a mildly improved appearance. Examination is otherwise unchanged.

REASON FOR EXAM: SOB/DYSPNEA

Dictated by:

(Electronic Signature)

Transcribed: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1618

\*\*\*END OF REPORT\*\*\*

DOB : 1976  
AGE/SEX : 20 YRS FEMALE  
DR. :

PAT TYPE :  
LOCATION :  
M.DADM/DIS : 96 |

PAT NAME :  
MED REC # :  
ROOM/BED :

DEPARTMENT OF RADIOLOGY

PROCEDURE -----	DATE/TIME -----	ORDERING PHYSICIAN -----	ACC # -----
CHEST PA/LAT	96 0756		

INDICATION: COUGH

Comparison 1996.

Interval removal of the right-sided chest tube. There is no residual pneumothorax. Nasogastric tube has been withdrawn. Minimal bibasilar increased density most likely representing atelectasis and/or minimal infiltrates are identified with evidence for interval improvement. Cardiomeastinal silhouette and pulmonary vascularity appear within limits of normal.

DICTATED BY:

(Electronic Signature)

TRANSCRIBED: 96

PAT NAME :  
MED REC# :  
ROOM/BED :  
PRINT DATE/TIME : 96 1237

\*\*\*END OF REPORT\*\*\*

PAGE: 1

DOB : 1976	PT. TYPE :	PT. NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION : EMERG ROOM	MED REC# :
DOCTOR :	M.DADM/DISCH : 96   96	ROOM/BED :

Pathologists:

\*\*\*\*\*  
 \* CHEMISTRY BLOOD GASES \*  
 \*\*\*\*\*

Day of Week:  
 Collected: 96  
 Time: 1736

		Units	Ref Range
----- Arterial Blood Gases -----			
PH	7.03C		[7.38-7.42]
PCO2	43	MMHG	[35-45]
PO2	550H	MMHG	[83-100]
BASE EXCESS	-19.0L		[-2.0-2.0]
O2 SATURATION	99.9	%	[94.0-99.9]
HC03	11.0C	MEQ/L	[21.0-28.0]
----- Blood Gases with entries in the columns below were performed on Near Patient Instrumentation -----			
FI O2	100		
O2 DEVICE	% VENT		
PATIENT TEMP	37.0		
SPECIMEN TYPE	ARTERIAL		
ISTAT IN NICU	280342		

Legend

L = Low, H = High, C = Critical

BLOOD GASES

PT. NAME :  
 MED REC# :  
 ROOM/BED :  
 PRINT DAT/TIME : 96 0112

PAGE 1

\*\*\* END OF CHART \*\*\*

DOB : 1976	PT. TYPE :	PT. NAME :
AGE/SEX : 20 YRS FEMALE	LOCATION :	MED REC# :
DOCTOR :	ADM/DISCH : 96   96	ROOM/BED :

Pathologists:

\*\*\*\*\*  
\* HEMATOLOGY \*  
\*\*\*\*\*

Day of Week:	THU	THU	THU	WED
Collected:	96	96	96	96
Time:	1019	0956	0500	1926

MONOCYTES

1

Units % Ref Range [0-12]

\*\*\*\*\*  
\* CHEMISTRY BLOOD GASES \*  
\*\*\*\*\*

Day of Week:	MON	SUN	SAT	THU	THU	THU
Collected:	96	96	96	96	96	96
Time:	0500	0500	0520	1239	1136	1102

Units Ref Range

----- Arterial Blood Gases -----								
PH	7.52H	7.60Cf	7.41	7.36L	7.34L	7.36L		[7.38-7.42]
PCO2	30L	34L	46H	30L	30L	29L	MMHG	[35-45]
PO2	92	136H	138H	108H	148H	165H	MMHG	[83-100]
BASE EXCESS	3.6H	13.2H	4.5H	-9.0L	-9.0L	-9.0L		[-2.0-2.0]
O2 SATURATION	97.8	99.1	98.7	98.0	99.0	99.0	%	[94.0-99.9]
HC03	24.9	33.8H	28.7H	17.0L	16.0L	16.0L	MEQ/L	[21.0-28.0]

O2 ADMIN RA ROOM AIR 2L NP  
96 0500 PH CALLED TO FLOOR 96 06:55

----- Blood Gases with entries in the columns below were performed on Near Patient Instrumentation -----

FI O2		40
O2 DEVICE	% VENT	
PATIENT TEMP	37.0	98.8
SPECIMEN TYPE	ARTERIAL	ARTERIAL
ISTAT ON 901 BY	299056	299056

Day of Week:	THU	THU	THU	WED	WED	WED
Collected:	96	96	96	96	96	96
Time:	1019	0956	0500	2023	1930	1825

Units Ref Range

----- Arterial Blood Gases -----								
PH	7.38	7.25C	7.40	7.28Cf	7.21C	7.08C		[7.38-7.42]
PCO2	28L	39	26L	36	42	56C	MMHG	[35-45]
PO2	175H	37C	193H	348H	230H	63L	MMHG	[83-100]
BASE EXCESS	-9.0L	-10.0L	-6.3L	-8.8L	-11.3L	-14.2L		[-2.0-2.0]
O2 SATURATION	99.9	62.0L	99.3	99.7	99.3	82.0L	%	[94.0-99.9]
HC03	16.0L	17.0L	16.1L	16.8L	17.0L	16.6L	MEQ/L	[21.0-28.0]

O2 ADMIN 50%VENT 80% VENT 100%VENT 100%VENT  
ART BLOOD GAS 96 1930 RESULTS CALLED TO X3233 96 19:40. KH  
ART BLOOD GAS 96 1825 RESULTS RECHECKED AND CALLED TO CAROL 96 18:36. KH  
96 2023 PH CALLED TO ON 96 20:59

----- Blood Gases with entries in the columns below were performed on Near Patient Instrumentation -----

PATIENT TEMP	37.0	37.0
SPECIMEN TYPE	ARTERIAL	ARTERIAL
ISTAT ON 901 BY	299056	299056

Legend  
L = Low, H = High, C = Critical, f = Footnote

PT. NAME :  
MED REC# :  
ROOM/BED :  
PRINT DAT/TIME : 96 0127

HEMATOLOGY BLOOD GASES

PAGE 2

DOB :	1976	PT. TYPE :		PT. NAME :
AGE/SEX :		LOCATION :		MED REC# :
DOCTOR :		M.DADM/DISCH :	96   96	ROOM/BED :

Pathologists:

\*\*\*\*\*  
 \* BLOOD BANK TRANSFUSED \*  
 \*\*\*\*\*

Unit Number	Product	Transfused	Date	Time
	PACKED RBC-ADSOL3		96	1912
	PACKED RBC-AS1		96	1000
	PACKED RBC-AS1		96	1000
	PACKED RBC-AS1		96	1912
	PACKED RBC-AS1		96	1912

\*\*\*\*\*  
 \* PENDING PROCEDURES \*  
 \*\*\*\*\*

Ordered	Procedure	Collection Status	Accession #	Ordering Physician
96 1730 ST	ABBREVIATED CROSSMATCH-IS&INT	96 1713 RECVD		
96 1713 ST	CROSSMATCH EXT	96 1713 RECVD		
96 1713 ST	TYPE AND XMATCH	96 1713 RECVD		

PT. NAME :  
 MED REC# :  
 ROOM/BED :  
 PRINT DAT/TIME : 96 0108

BB - TRANSFUSED PENDING TESTS

PAGE 1

\*\*\* END OF CHART \*\*\*



DOB : 1976 PT. TYPE : PT. NAME :  
 AGE/SEX : 20 YRS FEMALE LOCATION : MED REC# :  
 DOCTOR : ADM/DISCH : 96 | 96 ROOM/BED :

Pathologists:

\*\*\*\*\*  
 \* BLOOD BANK CUMULATIVE \*  
 \*\*\*\*\*

Day of Week: MON  
 Collected: '96  
 Time: 1230

----- Blood Group and Type -----  
 ABO RH TYPE A POS

----- Antibody Screening and Testing -----  
 ANTIBODY SCREEN . NEGATIVE

\*\*\*\*\*  
 \* BLOOD BANK TRANSFUSED \*  
 \*\*\*\*\*

Unit Number	Product	Transfused	Date	Time
	PACKED RBC-AS1		96	1654

\*\*\*\*\*  
 \* BLOOD BANK CROSS MATCH SUMMARY \*  
 \*\*\*\*\*

Collection	Date	Time	Unit Number	Interpretation	Accession Number
	96	1230		COMPAT	
	96	1230		COMPAT	
	96	1230		COMPAT	
	96	1230		COMPAT	
	96	1230		COMPAT	
	96	1230		COMPAT	

\*\*\*\*\*  
 \* VIRAL SEROLOGY PROCEDURES \*  
 \*\*\*\*\*

Day of Week: THU  
 Collected: 96  
 Time: 1120

RUBELLA ANTIBODY-IGG 3.54  
 RUBELLA IGG INTERPRETATION MID POS  
 RUBELLA ANTIBODY-IGM .21  
 RUBELLA IGM INTERPRETATION NEGATIVE  
 RUBELLA COMMENTS 96 1120

\*\*\*IgM test is done by the antibody capture method.  
 IgM range: <0.9 = negative  
 0.9-1.1 = equivocal  
 >1.1 = positive

C  
 Y  
 Y

Units Ref Range

PT. NAME :  
 MED REC# :  
 ROOM/BED :  
 PRINT DAT/TIME : 96 0127

BB XMATCH SUM SEROLOGY

BB - CUMULATIVE BB - TRANSFUSED

PAGE 4

**NASS CDS OCCUPANT INJURY FORM:**  
**FETUS IN CASE VEHICLE RIGHT FRONT PASSENGER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

BEST AVAILABLE  
Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	10	3. Vehicle Number	01
2. Case Number - Stratum	9623	4. Occupant Number	Fetus in RF Occupant X

INJURY DATA											
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.											
A.I.S. - 90											
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
Contusion Ventricles of heart	5. 1	6. 4	7. 4	8. 10	9. 04	10. 3	11. 4	12. 697	13. 9	14. 7	15. 99
Subarachnoid hemorrhages bilaterally	16. 1	17. 1	18. 4	19. 06	20. 84	21. 3	22. 3	23. 697	24. 9	25. 7	26. 99
Contusion thymus	27. 1	No code in AIS '90					34. 697	35. 9	36. 7	37. 99	
Contusions bilateral Lungs	38. 1	39. 4	40. 4	41. 14	42. 10	43. 4	44. 3	45. 697	46. 9	47. 7	48. 99
Fx, 4th parietal skull	49. 1	50. 1	51. 5	52. 04	53. 02	54. 2	55. 2	56. 697	57. 9	58. 7	59. 99
Subgaleal hematoma	60. 1	61. 1	62. 9	63. 04	64. 02	65. 1	66. 2	67. 697	68. 9	69. 7	70. 99
7th	71. ___	72. ___	73. ___	74. ___	75. ___	76. ___	77. ___	78. ___	79. ___	80. ___	81. ___
8th	82. ___	83. ___	84. ___	85. ___	86. ___	87. ___	88. ___	89. ___	90. ___	91. ___	92. ___
9th	93. ___	94. ___	95. ___	96. ___	97. ___	98. ___	99. ___	100. ___	101. ___	102. ___	103. ___
10th	104. ___	105. ___	106. ___	107. ___	108. ___	109. ___	110. ___	111. ___	112. ___	113. ___	114. ___

OCCUPANT INJURY DATA											
Source of Injury Data	A.I.S. - 90					Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity						
11th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck			(3) Bilateral
(4) Thorax			(4) Central
(5) Abdomen	<u>Vessels, Nerves, Organs.</u>	To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region

**Type of Anatomic Structure**

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes Muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC
- (04) Level
- (06) of
- (08) Consciousness
- (10) Concussion

Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

**Abbreviated Injury Scale**

- (1) Minor Injury
- (2) Moderate Injury
- (3) Serious Injury
- (4) Severe Injury
- (5) Critical Injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

**SOURCE OF INJURY DATA****INJURY SOURCE  
CONFIDENCE LEVEL****DIRECT/INDIRECT INJURY**OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

• Height: 18.5 inches; Weight: 2.7 kg (A)

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol Level  
(mg/dl)

BAL = 0  
(A)

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

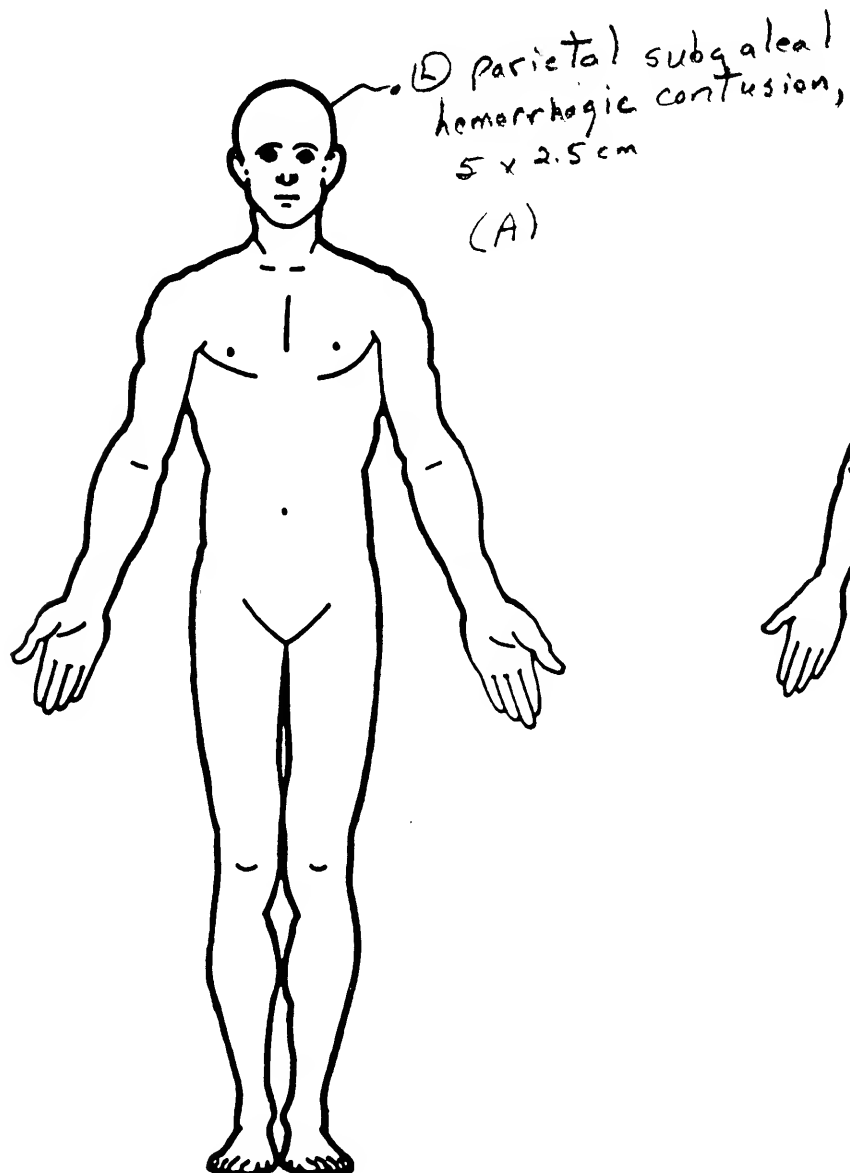
Arterial Blood Gases

pH = \_\_\_

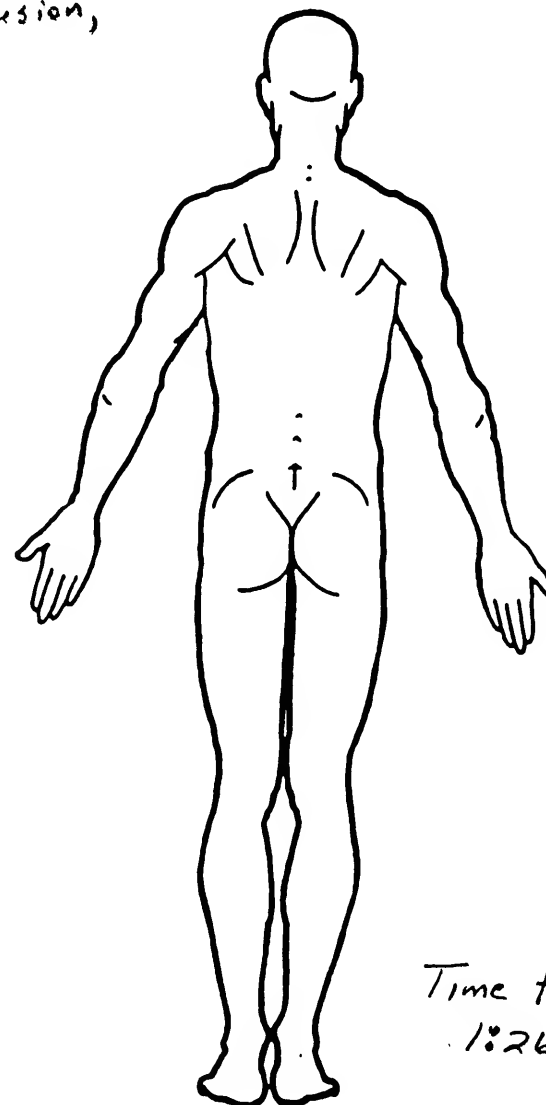
PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> = \_\_\_

HCO<sub>3</sub> = \_\_\_

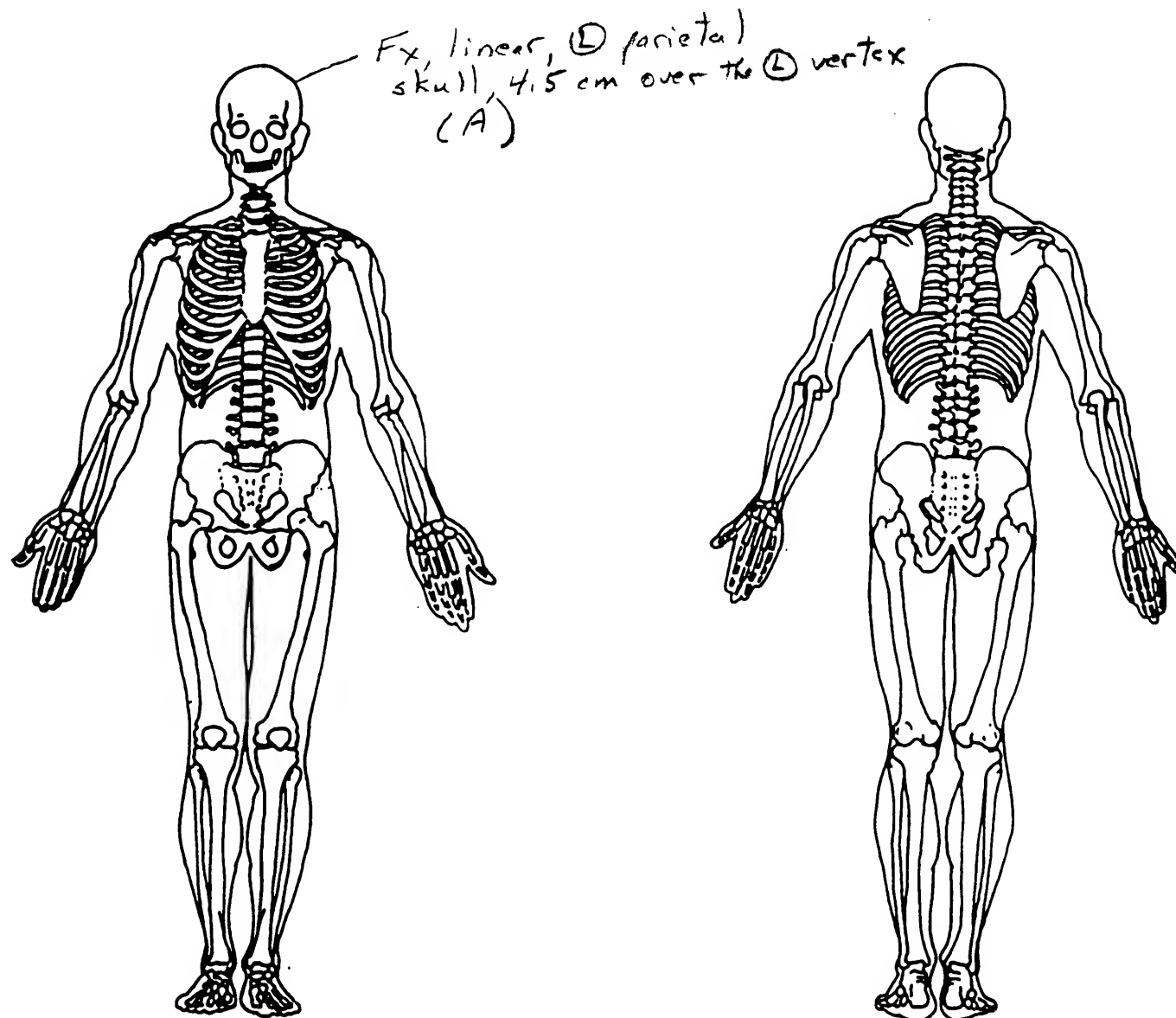


• Approximately 36 week gestation male



## OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



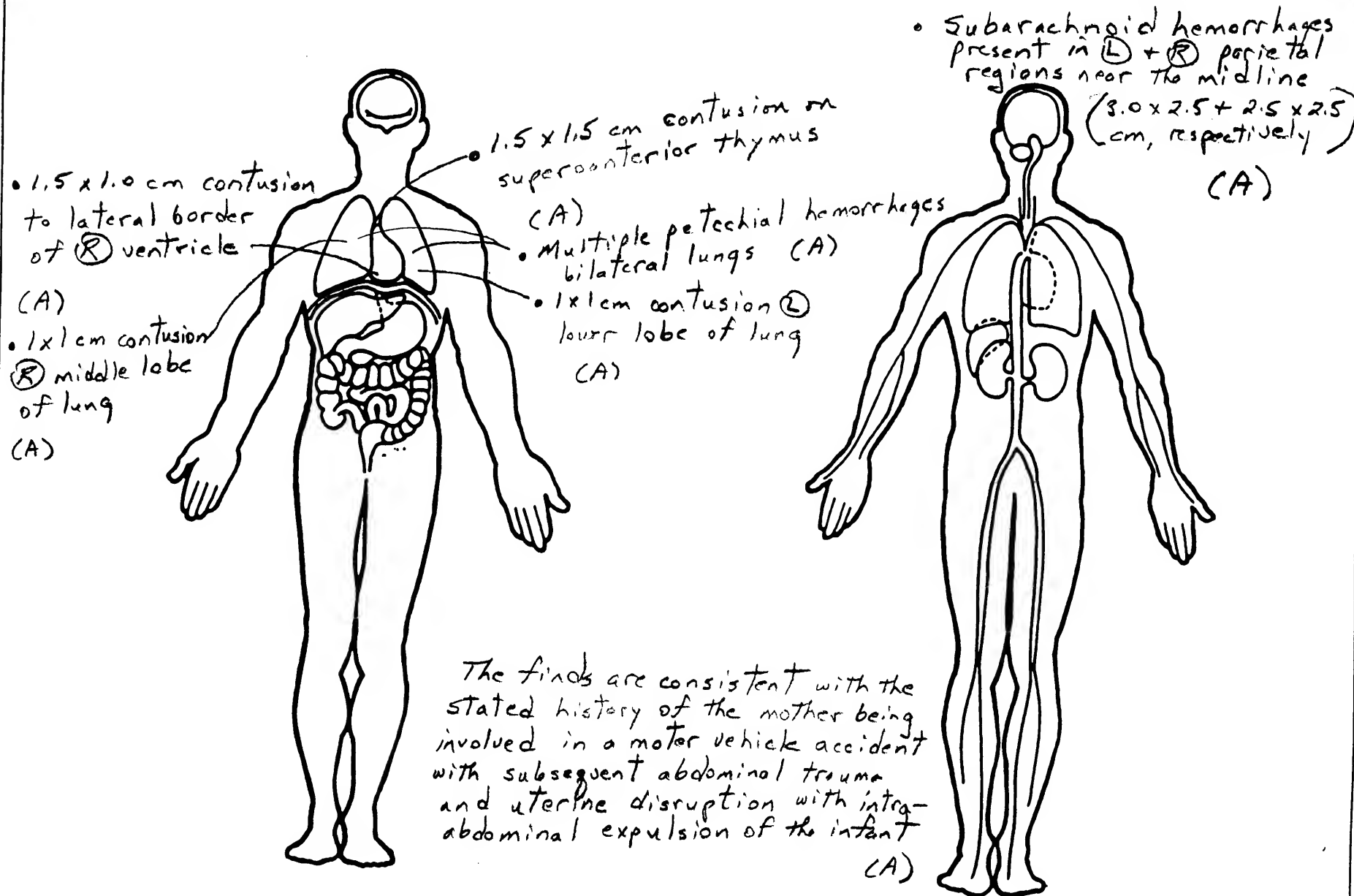


## INJURY SOURCES

<b>FRONT</b>		(102) Right side hardware or armrest	(183) Air bag-passenger side and object held	(411) Wall mounted head rest (used behind wheel chair)
(001) Windshield	(103) Right A (A1/A2)-pillar	(104) Right B-pillar	(184) Air bag-passenger side and object in mouth	(412) Other adaptive device (specify): _____
(002) Mirror	(105) Other right pillar (specify): _____	(106) Right side window glass	(185) Air bag compartment cover-passenger side	
(003) Sunvisor	(107) Right side window frame	(108) Right side window sill	(186) Air bag compartment cover-passenger side and eyewear	<b>EXTERIOR of OCCUPANT'S VEHICLE</b>
(004) Steering wheel rim	(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(110) Other right side object (specify): _____	(187) Air bag compartment cover-passenger side and jewelry	(451) Hood
(005) Steering wheel hub/spoke			(188) Air bag compartment cover-passenger side and object held	(452) Outside hardware (e.g., outside mirror, antenna)
(006) Steering wheel (combination of codes 004 and 005)			(189) Air bag compartment cover-passenger side and object in mouth	(453) Other exterior surface or tires (specify): _____
(007) Steering column, transmission selector lever, other attachment			(190) Other air bag (specify) _____	(454) Unknown exterior objects
(008) Cellular telephone or CB radio			(195) Other air bag compartment cover (specify) _____	<b>EXTERIOR OF OTHER MOTOR VEHICLE</b>
(009) Add on equipment (e.g., tape deck, air conditioner)	<b>INTERIOR</b>	(151) Seat, back support		(501) Front bumper
(010) Left instrument panel and below	(152) Belt restraint webbing/buckle	(153) Belt restraint B-pillar or door frame attachment point		(502) Hood edge
(011) Center instrument panel and below	(154) Other restraint system component (specify): _____	(155) Head restraint system	<b>ROOF</b>	(503) Other front of vehicle (specify): _____
(012) Right instrument panel and below	(160) Other occupants (specify): _____	(161) Interior loose objects	(201) Front header	(504) Hood
(013) Glove compartment door	(162) Child safety seat (specify): _____	(163) Other interior object (specify): _____	(202) Rear header	(505) Hood ornament
(014) Knee bolster			(203) Roof left side rail	(506) Windshield, roof rail, A-pillar
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)			(204) Roof right side rail	(507) Side surface
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)			(205) Roof or convertible top	(508) Side mirrors
(017) Windshield reinforced by exterior object (specify) _____			<b>FLOOR</b>	(509) Other side protrusions (specify): _____
(019) Other front object (specify): _____	<b>AIR BAG</b>	(170) Air bag-driver side	(251) Floor (including toe pan)	(510) Rear surface
	(171) Air bag-driver side and eyewear	(172) Air bag-driver side and jewelry	(252) Floor or console mounted transmission lever, including console	(511) Undercarriage
<b>LEFT SIDE</b>	(173) Air bag-driver side and object held	(174) Air bag-driver side and object in mouth	(253) Parking brake handle	(512) Tires and wheels
(051) Left side interior surface, excluding hardware or armrests	(175) Air bag compartment cover-driver side	(176) Air bag compartment cover-driver side and eyewear	(254) Foot controls including parking brake	(513) Other exterior of other motor vehicle (specify): _____
(052) Left side hardware or armrest	(177) Air bag compartment cover-driver side and jewelry	(178) Air bag compartment cover-driver side and object held	<b>REAR</b>	(514) Unknown exterior of other motor vehicle
(053) Left A (A1/A2)-pillar	(179) Air bag compartment cover-driver side and object in mouth	(180) Air bag-passenger side	(301) Backlight (rear window)	<b>OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT</b>
(054) Left B-pillar	(181) Air bag-passenger side and eyewear	(182) Air bag-passenger side and jewelry	(302) Backlight storage rack, door, etc.	(551) Ground
(055) Other left pillar (specify): _____			(303) Other rear object (specify): _____	(598) Other vehicle or object (specify): _____
(056) Left side window glass			<b>ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT</b>	(599) Unknown vehicle or object
(057) Left side window frame			(401) Hand controls for braking/acceleration	<b>NONCONTACT INJURY</b>
(058) Left side window sill			(402) Steering control devices (attached to OEM steering wheel)	(601) Fire in vehicle
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.			(403) Steering knob attached to steering wheel	(602) Flying glass
(060) Other left side object (specify): _____			(405) Replacement steering wheel (i.e., reduced diameter)	(603) Other noncontact injury source (specify): _____
<b>RIGHT SIDE</b>			(406) Joy stick steering controls	(604) Air bag exhaust gases
(101) Right side interior surface, excluding hardware or armrests			(407) Wheelchair tie-downs	(697) Injured, unknown source
			(408) Modification to seat belts. (specify): _____	
			(409) Additional or relocated switches. (specify): _____	
			(410) Raised roof	

# OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# CAUSE OF DEATH

BEST AVAILABLE

Uterine Disruption (MI, A)  
Maternal Trauma (MI, A)

## ICD-9-CM

### OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

### MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy—medical information based upon an invasive examination of a body
ME	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FS	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
FX	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
FN	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report—where the author of this information is undefined
EN	Emergency room nurse—"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records—taken during the patients stay in the emergency room
CV	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

MI = Medical Examiner's Report of Investigation

BEST AVAILABLE

## OFFICE OF THE CHIEF MEDICAL EXAMINER

OFFICE USE ONLY

Re. \_\_\_\_\_ Co. \_\_\_\_\_

I hereby certify that this is a true and correct copy of the original document. Valid only when copy bears imprint of the office seal.

By \_\_\_\_\_  
Date \_\_\_\_\_

## REPORT OF INVESTIGATION BY MEDICAL EXAMINER

DECEDENT—First—Middle—Last Names (Please avoid use of initials) ( YEARBY )	Age	Birth Date 1996	Race W	Sex M	Marital Status SINGLE
---	-----	--------------------	-----------	----------	--------------------------

HOME ADDRESS—No. Street, City, State

Occupation

N. A.

## TYPE OF DEATH: (Check one only)

While in penal incarceration ☐  
 After unexplained coma ☐  
 During therapeutic procedure ☐  
 Death possible threat to public health ☐  
 Unattended stillbirth or by midwife only ☐

Unattended during fatal illness ☐  
 Found dead without obvious cause ☐  
 \*Under suspicious circumstances ☐  
 \*Violent, unusual or unnatural XXXX  
 \*Means:

MOTOR VEHICLE

If motor vehicle accident, check one of the following  
 DRIVER ☐  
 CYCLIST ☐  
 PASSENGER XXXX  
 PEDESTRIAN ☐

EXAMINER NOTIFIED BY—NAME—TITLE (AGENCY, INSTITUTION, OR ADDRESS)

DATE	TIME
1996	1804

POLICE DEPARTMENT

INJURED OR BECAME ILL AT (ADDRESS)	CITY OR COUNTY	TYPE OF PREMISES ROADWAY	DATE	TIME
			1996	1542

LOCATION OF DEATH (ADDRESS OR NAME OF INSTITUTION)	CITY OR COUNTY	TYPE OF PREMISES HOSPITAL	DATE	TIME
			1996	1708

BODY VIEWED BY MEDICAL EXAMINER AT (ADDRESS)	CITY OR COUNTY	TYPE OF PREMISES OFFICE	DATE	TIME
			1996	

DESCRIPTION OF BODY	RIGOR	LIVOR	EXTERNAL OBSERVATIONS	NOSE	MOUTH	EARS
EXTERNAL PHYSICAL EXAMINATION	Jaw <input type="checkbox"/> Complete <input type="checkbox"/>	Color _____	Clothed <input type="checkbox"/> Unclothed <input type="checkbox"/>	BLOOD		
	Neck <input type="checkbox"/> Absent <input type="checkbox"/>	Anterior <input type="checkbox"/>	Partly Clothed <input type="checkbox"/> Hair _____	FROTH		
	Arms <input type="checkbox"/> Passed <input type="checkbox"/>	Posterior <input type="checkbox"/>	Beard _____ Mustache _____	OTHER (Sand, dirt, water, etc.)		
	Legs <input type="checkbox"/> Decomposed <input type="checkbox"/>	Lateral <input type="checkbox"/>	Circumcised <input type="checkbox"/>			
Significant observations and injury documentation—(Please use space below)		Regional _____	Eyes: Color _____	(cm) LENGTH _____	(kg) WEIGHT _____	BODY HEAT:
			Pupils: Opacities, Etc. R _____ L _____			

SEE AUTOPSY PROTOCOL

## Probable cause of death:

UTERINE DISRUPTION  
MATERNAL TRAUMA

## Manner of death: (Check one only)

Natural ☐ Accident ☒  
 Suicide ☐ Homicide ☐  
 Unknown ☐ Pending ☐

## Case disposition:

Autopsy: Yes ☒ No ☐  
 Authorized by MEDICAL EXAMINER  
 Pathologist \_\_\_\_\_  
 Not a medical examiner case ☐

MEDICAL EXAMINER  
Name, Address and Telephone No.

I hereby state that, after receiving notice of the death described herein, I conducted an investigation as to the cause and manner of death, as required by law, and that the facts contained herein regarding such death are true and correct to the best of my knowledge and belief.

County of Appointment

Date

1996

Signature of Medical Examiner

OFFICE OF THE CHIEF MEDICAL EXAMINER

OFFICE USE ONLY

I hereby certify that this is a true and correct copy of the original document. Valid only when copy bears imprint of the office seal.

By \_\_\_\_\_

Date \_\_\_\_\_

REPORT OF AUTOPSY BY MEDICAL EXAMINER

DECEDENT	First-Middle-Last Names (Please avoid use of initials)	Age	Birth Date	Race	Sex	Marital Status
		SB	1996	W	M	SINGLE

AUTOPSY	Authority for Autopsy	Present at Autopsy	Identified By

TYPE OF DEATH

<input type="checkbox"/> While in penal incarceration	<input type="checkbox"/> Death possible threat to public health	<input type="checkbox"/> Under suspicious circumstances
<input type="checkbox"/> After unexplained coma	<input type="checkbox"/> Unattended stillbirth or by midwife only	<input checked="" type="checkbox"/> Violent, unusual or unnatural
<input type="checkbox"/> During therapeutic procedure	<input type="checkbox"/> Unattended during fatal illness	
	<input type="checkbox"/> Found dead without obvious cause	*Means: motor vehicle

PATHOLOGICAL DIAGNOSIS

- I. Approximately 36 week gestation male infant.  
 A) Left parietal subgaleal hemorrhage and linear skull fracture.

NOTE:

The findings at autopsy are consistent with the stated history of the mother being involved in a motor vehicle accident with subsequent abdominal trauma and uterine disruption with intra-abdominal expulsion of the infant.

CAUSE OF DEATH:

UTERINE DISRUPTION MATERNAL TRAUMA

AUTOPSY NO.

CASE NO.

The facts stated herein are true and correct to the best of my knowledge and belief.

Signature of Pathologist

96 (1300)  
 Date and time of autopsy

Place of autopsy

## GROSS EXAMINATION

AUTOPSY NO.

CASE NO.

=====

The body is opened through the customary "Y" shaped incision.

Subcutaneous fat is normally distributed, moist, and bright yellow. The musculature through the chest and abdomen is rubbery, maroon, and shows no gross abnormality.

The sternum is removed in the customary fashion. The organs of the chest and abdomen are in normal position and relationship. The diaphragms are intact bilaterally.

### PARIETAL PLEURA:

Smooth, glistening membrane without associated adhesions or abnormal effusions.

### PERICARDIUM:

Is a smooth, glistening, intact membrane, and the pericardial cavity, itself, contains the normal amount of clear, straw-colored fluid.

### PERITONEUM:

Smooth, glistening membrane in both the abdominal and pelvic cavities. The peritoneal cavity contains no abnormal fluid or adhesions.

### HEART:

Weights 30 gm. It has a normal configuration and location. There is a 1.5 x 1.0 cm red-purple contusion on the right lateral border of the right ventricle. The coronary arteries arise and distribute normally with no significant atherosclerosis. The coronary ostia are normally located and widely patent. The chambers and atrial appendages are unremarkable. The valves are normally formed and measure as follows: tricuspid 3.0 cm, pulmonic 1.8 cm, mitral 3.0 cm, and aortic 1.9 cm. The endocardium is a smooth, gray, glistening, translucent membrane uniformly. The myocardium is intact, rubbery, and red-tan, with the left ventricle measuring 0.4 cm, the septum measuring 0.4 cm, and the right ventricle measuring 0.6 cm. The papillary muscles and chordae tendineae are intact and unremarkable. The arch of the aorta is classically formed with no atherosclerosis. Other great vessels also arise and distribute normally and are widely patent.

## **GROSS - 2      CASE NO:**

### **NECK ORGANS:**

Musculature is normal, rubbery, and maroon, and the organs are freely movable in a midline position. The tongue is intact and normally papillated, without evidence of tumor or hemorrhage. The hyoid bone is intact. The thyroid cartilage is intact and without abnormality. The thyroid gland weighs 1.4 gms, is symmetric, rubbery, light tan to maroon, and in its normal position without evidence of neoplasm. The epiglottis is a characteristic plate-like structure which shows no evidence of edema, trauma, or other gross pathology. The larynx is comprised of unremarkable vocal cords and folds, is widely patent without foreign material, and is lined by a smooth, glistening membrane. There are no petechiae of the epiglottis, laryngeal mucosa, or thyroid capsule.

### **THYMUS:**

The thymus weighs 14.3 gms and shows a 1.5 x 1.5 cm red-purple contusion on its superoanterior aspect. The cut surface of the thymus shows a red-tan parenchyma.

### **LUNGS:**

The right lung weighs 30.4 gm, and the left weighs 24.5 gm. The right middle lobe shows a 1 x 1 cm red-purple contusion and the left lower lobe base shows a 1 x 1 cm red-purple contusion peripherally. Each lung shows multiple petechial hemorrhages. The overall configuration is normal. The trachea is widely patent and lined by characteristic pink membrane. Likewise, the major bronchi and bronchioles bilaterally are patent, normally formed, and contain no significant occlusive material. The pulmonary arterial tree is free of emboli or thrombi. The parenchyma is uniformly spongy, varies from pink-tan to dark purple, and exudes moderate amounts of blood and clear, frothy edema fluid from its cut surfaces. There is no evidence of consolidation, granulomatous, or neoplastic disease. Hilar lymph nodes are within normal limits with relation to size, color, and consistency.

### **G.I. TRACT:**

The esophagus shows an unremarkable mucosa, a patent lumen, and no evidence of gross pathology. The esophagogastric junction is unremarkable. The stomach is of normal configuration, is lined by a smooth, glistening, intact mucosa, has an unremarkable wall and serosa, and contains a small amount of yellow, mucoid material which has passed to the duodenum. The duodenum, itself, is patent, shows an unremarkable mucosa and no evidence of acute or chronic ulceration. Jejunum and ileum are unremarkable and contain soft brown fecal material. There is no Meckel's diverticulum. The ileocecal valve is intact and unremarkable. The appendix is present. The large bowel shows extensive meconium-staining. Anus and rectum are unremarkable.



**GROSS - 3      CASE NO:**

**LIVER:**

Weighs 116.2 gm. It is of normal configuration, rubbery, tan, and intact. Cut surface shows no pathology.

**GALLBLADDER:**

Lies in its usual location, contains liquid bile, no calculi, and shows a normal mucosa. The biliary tree is intact and patent without evidence of neoplasm or calculi.

**PANCREAS:**

Lies in its normal position, shows a normal configuration, is pink-tan and characteristically lobulated with no apparent gross pathology.

**SPLEEN:**

Weighs 7.8 gm. The capsule is intact. The organ is rubbery, maroon, and shows characteristic follicular pattern.

**ADRENALS:**

The right adrenal weighs 2.7 gms and the left adrenal weighs 2.9 gms. Lie in their usual location, show yellow cortices and tan to gray medullae.

**KIDNEYS:**

The right kidney weighs 9.5 gm and the left weighs 9.5 gm. Both are configured normally with no abnormality. Sections show the organs to be moderately congested with unremarkable cortices, medullae, and pelves. Ureters and blood vessels are patent and unremarkable.

**URINARY BLADDER:**

Contains a small amount of yellow urine. Its serosa and mucosa are unremarkable.

**MALE GENITALIA:**

The testes are present, bilaterally and show no evidence of trauma or inflammation. the investing membranes are unremarkable, as is the epididymis.

**GROSS - 4      CASE NO:**

**BRAIN AND MENINGES:**

The scalp is opened through the customary intermastoid incision and shows a linear skull fracture 4.5 cm over the left vertex with a surrounding 5 x 2.5 cm red-purple contusion. There are subarachnoid hemorrhages present in the left and right parietal regions near the midline, 3.0 x 2.5 cm and 2.5 x 2.5 cm, respectively. The calvarium is removed through the use of an oscillating saw and is intact without evidence of osseous disease. The brain weighs 360 gm. Cranial nerves and circle of Willis arise and distribute normally and show no significant pathology. Externally the brain is normally configured and symmetric, and multiple serial sections of cerebral hemispheres, pons, medulla, and cerebellum show no gross pathological change apart from moderate congestion. The ventricular system is also symmetric and unremarkable. The base of the skull is intact without osseous abnormality.

**PLACENTA:**

The placenta is received fresh in a white plastic bag and weighs 460 gms. The placental measurements are 16 x 15 x 2.5 cm. The three vessel umbilical cord is 30 cm in length and inserts 2.5 cm from the margin. The fetal surface is blue-grey and approximately 30% of the fetal surface is missing. Approximately 50% of the maternal surface is covered by blood clot. No membranes are included with the placenta.

Dictated by:

## MICROSCOPIC DESCRIPTION

AUTOPSY NO.

CASE NO.

=====

Multiple sections of all major organs confirm the gross impression and add nothing to the diagnoses.

1996

\_\_\_\_\_

2.7kg  
18 1/8 in

INFANT – VENTRAL, DORSAL, AND LEFT AND RIGHT LATERAL VIEWS

96

one white plastic diaper

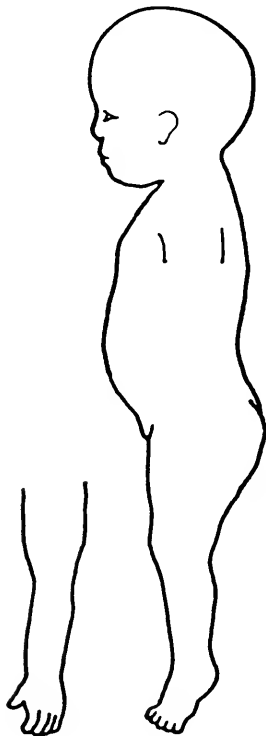
clamped  
cord

black hair

pupils - ~~black~~  
eyes - blue

uncircumcised  
male

hospital ID tag

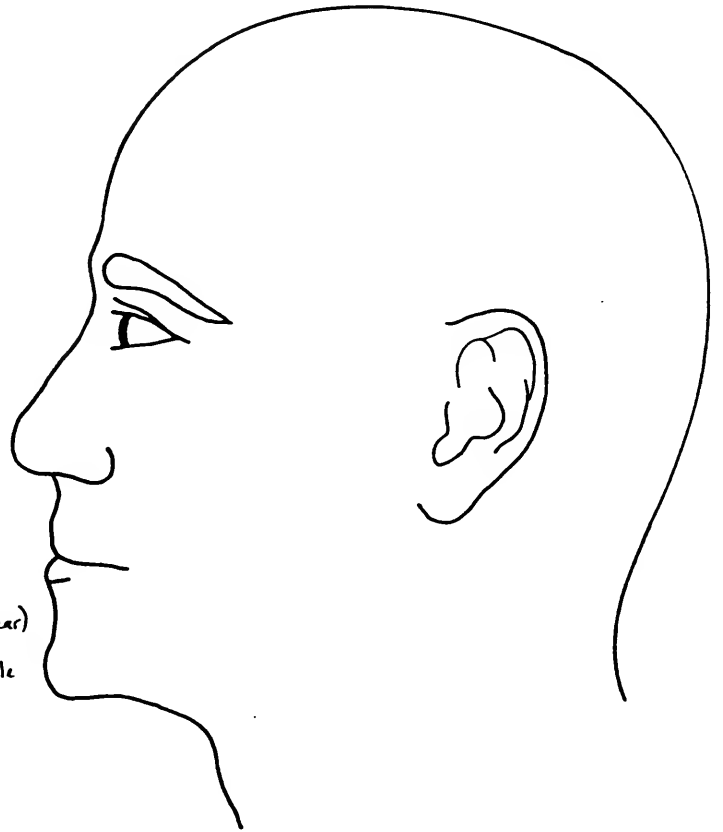
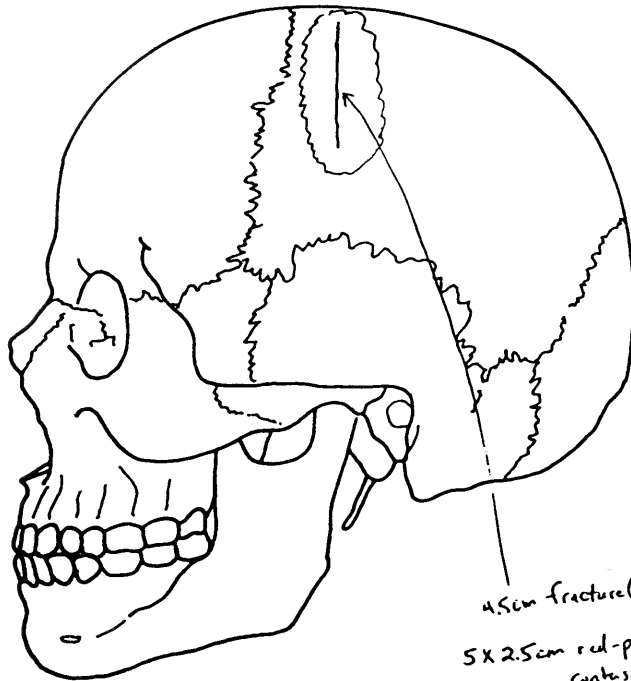
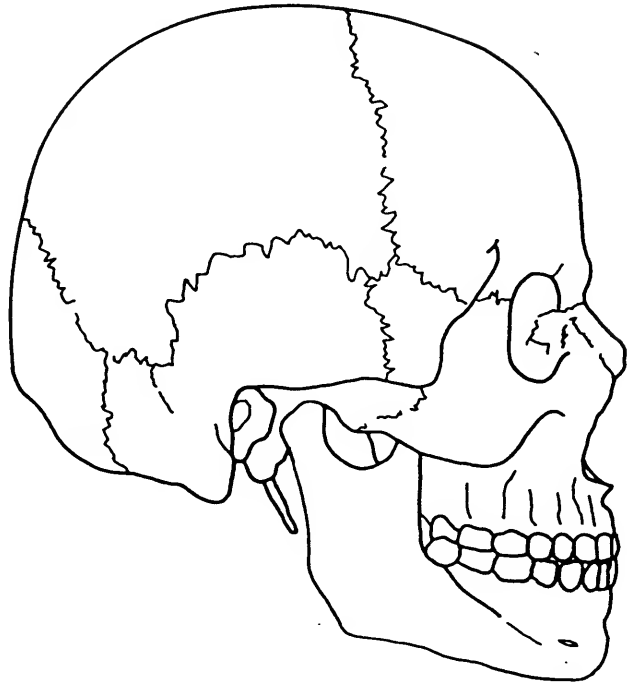
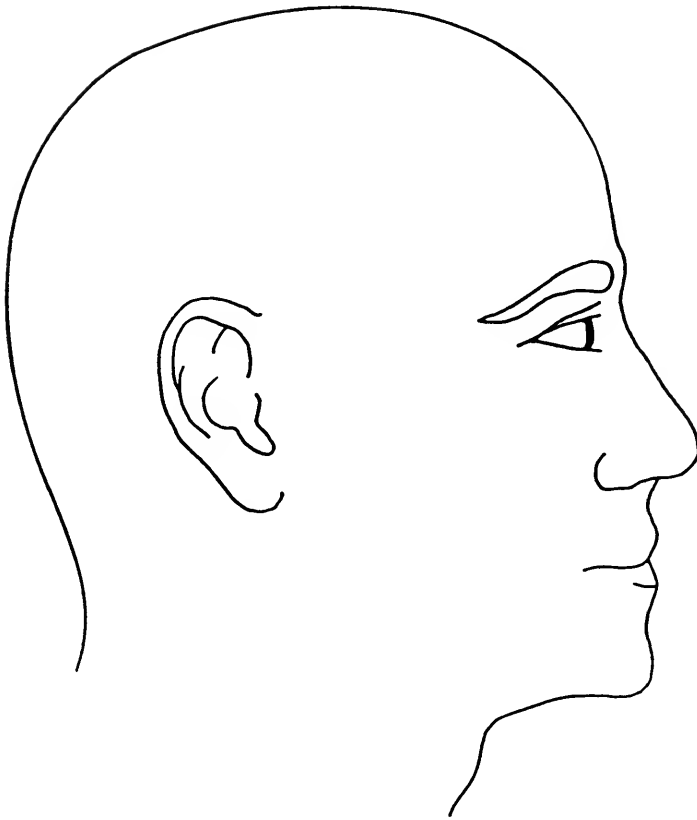


Name \_\_\_\_\_

Case No. \_\_\_\_\_

Date \_\_\_\_\_ 96

HEAD – SURFACE AND SKELETAL ANATOMY, LATERAL VIEW



Name \_\_\_\_\_ Case No. \_\_\_\_\_

Date \_\_\_\_\_ 96

BEST AVAILABLE  
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By                                     

Date                     

OFFICE OF THE CHIEF MEDICAL EXAMINER

REPORT OF LABORATORY ANALYSIS

AMENDED

NAME:

LABORATORY NO.

MATERIAL SUBMITTED:

Blood, Liver

DATE RECEIVED:

1996

CASE NO.:

SUBMITTED BY:

MEDICAL EXAMINER:

RESULTS:

BLOOD: (Heart)

Ethyl Alcohol - Negative

1996

DATE

Chief Forensic Toxicologist

Please Note: Unless notified in writing to the contrary, the specimen(s) submitted in this case will be discarded at the end of 60 days.

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**VEHICLE #2 DRIVER**





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT ASSESSMENT FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9623

3. Vehicle Number 02

4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 73

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex 2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height 155

Code actual height to the nearest  
centimeter.

(999) Unknown

61 inches X 2.54 = 154.94 centimeters

8. Occupant's Weight 057

Code actual weight to the nearest  
kilogram.

(999) Unknown

125 pounds X .4536 = 56.70 kilograms

9. Occupant's Role 1

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 11

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture 0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown

**EJECTION/ENTRAPMENT****12. Ejection**

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0**13. Ejection Area**

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0**14. Ejection Medium**

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

0**15. Medium Status (Immediately Prior To Impact)**

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0**16. Entrapment**

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0**17. Occupant Mobility**

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

2

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 1

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 4

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

\_\_\_\_\_  
 (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection  
☐ Official injury data  
☐ Driver/occupant interview  
☐ Other (specify):

☐ Unknown if belt used

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

30. Frontal Air Bag System Availability/Function 1  
(This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment 1  
(This Occupant Position)

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function 0  
(This Occupant Position)

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

\_\_\_\_\_

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? 1  
(This Occupant Position)

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available  
1 Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):

- (6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 037

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): Scuffs  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued***HEAD RESTRAINT AND SEAT EVALUATION**44. Source of Air Bag Damage 01

(00) Not equipped/not available

(01) Not damaged

(02) Object worn by occupant, (specify):

(03) Object carried by occupant, (specify):

(04) Adaptive/assistive controls, (specify):

(05) Fire in vehicle

(06) Thermal burns

(07) Rescue or emergency efforts

(88) Other damage source (specify):

(95) Damaged, unknown source

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

45. Was The Air Bag Tethered? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify number of tether straps):

(3) Deployed, unknown if tethered

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

46. Did The Air Bag Have Vent Ports? 2

(0) Not equipped/not available

(1) No

(2) Yes (specify number of vent ports):

Two

(3) Deployed, unknown if vent ports present

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

47. Was the Air Bag in this Occupant's Position  
Contacted by Another Occupant? 2

(0) Not equipped/not available

(1) No

(2) Yes (specify):

(3) Deployed, unknown if other occupant contact  
to air bag

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

48. Was This Occupant Wearing Eye-wear? 2

(0) Not air bag equipped/air bag not available

(1) No

(2) Eyeglasses/sunglasses

(3) Contact lenses

(4) Deployed, unknown if eyewear worn

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

49. Head Restraint Type/Damage by Occupant  
at This Occupant Position 3

(0) No head restraints

(1) Integral—no damage

(2) Integral—damaged during accident

(3) Adjustable—no damage

(4) Adjustable—damaged during accident

(5) Add-on—no damage

(6) Add-on—damaged during accident

(8) Other (specify):

(9) Unknown

50. Seat Type (this Occupant Position) 07

(00) Occupant not seated or no seat

(01) Bucket

(02) Bucket with folding back

(03) Bench

(04) Bench with separate back cushions

(05) Bench with folding back(s)

(06) Split bench with separate back cushions

(07) Split bench with folding back(s)

(08) Pedestal (i.e., column supported)

(09) Box mounted seat (i.e., van type)

(10) Other seat type (specify):

(99) Unknown

51. Seat Orientation (this Occupant Position) 1

(0) Occupant not seated or no seat

(1) Forward facing seat

(2) Rear facing seat

(3) Side facing seat (inward)

(4) Side facing seat (outward)

(8) Other (specify):

(9) Unknown

52. Seat Track Adjusted Position Prior To Impact 3

(0) Occupant not seated or no seat

(1) Non-adjustable seat track

*Adjustable Seat Track*

(2) Seat at forward most track position

(3) Seat between forward most and middle track  
positions

(4) Seat at middle track position

(5) Seat between middle and rear most track  
positions

(6) Seat at rear most track position

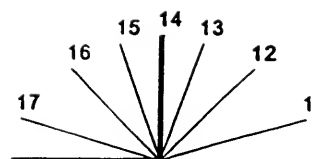
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 1 4

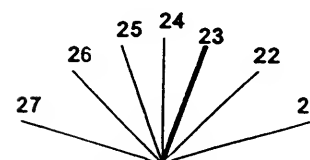
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

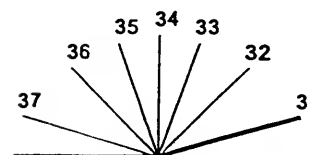
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment  
     intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown



**CHILD SAFETY SEAT**55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

**64. Hospital Stay**01

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost**97

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**

66. Time to Death 00  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

(99) Unknown

70. Number of Recorded Injuries for This Occupant 07  
7 Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score 02  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

72. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 01  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 1  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**VEHICLE #2 DRIVER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

BEST AVAILABLE  
Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>02</u>
2. Case Number - Stratum	<u>9623</u>	4. Occupant Number	<u>01</u>

INJURY DATA																							
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.																							
Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90 Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number													
Fractured 4th ribs	1st	5.	7.	4.	5.	02	9.	40	10.	3	11.	1	12.	697	13.	9	14.	7	15.	99			
Fractured 2nd forearm	2nd	16.	7	17.	7	18.	5	19.	18	20.	00	21.	2	22.	2	23.	004	24.	2	25.	2	26.	00
Sprain 3rd wrist	3rd	27.	7	28.	7	29.	5	30.	14	31.	20	32.	1	33.	2	34.	004	35.	2	36.	1	37.	00
Fractured 4th calcaneus	4th	38.	7	39.	8	40.	5	41.	14	42.	00	43.	2	44.	1	45.	251	46.	2	47.	1	48.	00
Sprain 5th ankle	5th	49.	7	50.	8	51.	5	52.	02	53.	06	54.	1	55.	1	56.	251	57.	2	58.	1	59.	00
Laceration upper lip	6th	60.	7	61.	2	62.	9	63.	06	64.	00	65.	1	66.	8	67.	170	68.	2	69.	1	70.	00
Contusion Knee	7th	71.	7	72.	8	73.	9	74.	04	75.	02	76.	1	77.	1	78.	010	79.	1	80.	1	81.	00
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.												
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.												
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.												

BEST AVAILABLE

## OCCUPANT INJURY DATA

	Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90			Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
				Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
11th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive	(1) Right
(2) Face		two-digit numbers	(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>	beginning with 02.	(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned		(4) Central
(5) Abdomen	consecutive two digit		(5) Anterior
(6) Spine	numbers beginning with	To the extent possible,	(6) Posterior
(7) Upper Extremity	02.	within the organizational	(7) Superior
(8) Lower Extremity		framework of the AIS, 00	(8) Inferior
(9) Unspecified	The exceptions to this rule	is assigned to an injury	(9) Unknown
	apply to:	NFS as to severity or	(0) Whole region

**Type of Anatomic Structure**

- (1) Whole Area  
 (2) Vessels  
 (3) Nerves  
 (4) Organs (includes Muscles/ligaments)  
 (5) Skeletal (includes joints)  
 (6) Head - LOC  
 (9) Skin

Whole Area

- (02) Skin - Abrasion  
 (04) Skin - Contusion  
 (06) Skin - Laceration  
 (08) Skin - Avulsion  
 (10) Amputation  
 (20) Burn  
 (30) Crush  
 (40) Degloving  
 (50) Injury - NFS  
 (90) Trauma, other than mechanical

Head - LOC

- (02) Length of LOC  
 (04) Level  
 (06) of  
 (08) Consciousness  
 (10) Concussion

Spine

- (02) Cervical  
 (04) Thoracic  
 (06) Lumbar

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

**Abbreviated Injury Scale**

- (1) Minor Injury  
 (2) Moderate Injury  
 (3) Serious Injury  
 (4) Severe Injury  
 (5) Critical Injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

**SOURCE OF INJURY DATA**OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records  
 (2) Hospital/medical records other than emergency room (e.g., discharge summary)  
 (3) Emergency room records only (including associated X-rays or other lab reports)  
 (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report  
 (6) E.M.S. personnel  
 (7) Interviewee  
 (8) Other source (specify):  
 (9) Police

**INJURY SOURCE****CONFIDENCE LEVEL**

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

**DIRECT/INDIRECT INJURY**

- (1) Direct contact injury  
 (2) Indirect contact injury  
 (3) Noncontact injury  
 (7) Injured, unknown source



## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

☐ No

☐ Yes

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

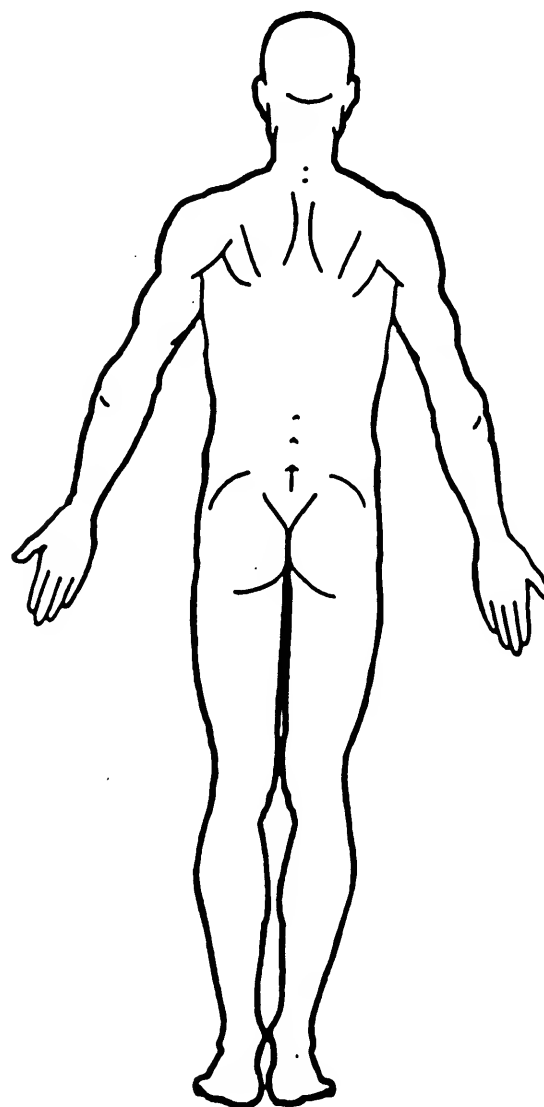
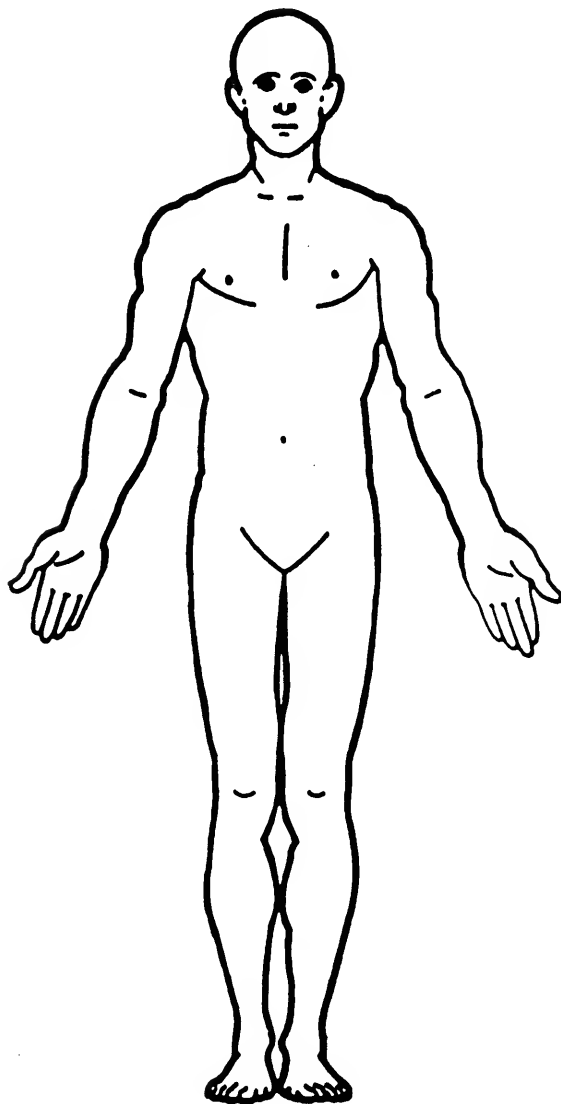
Arterial Blood Gases

pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

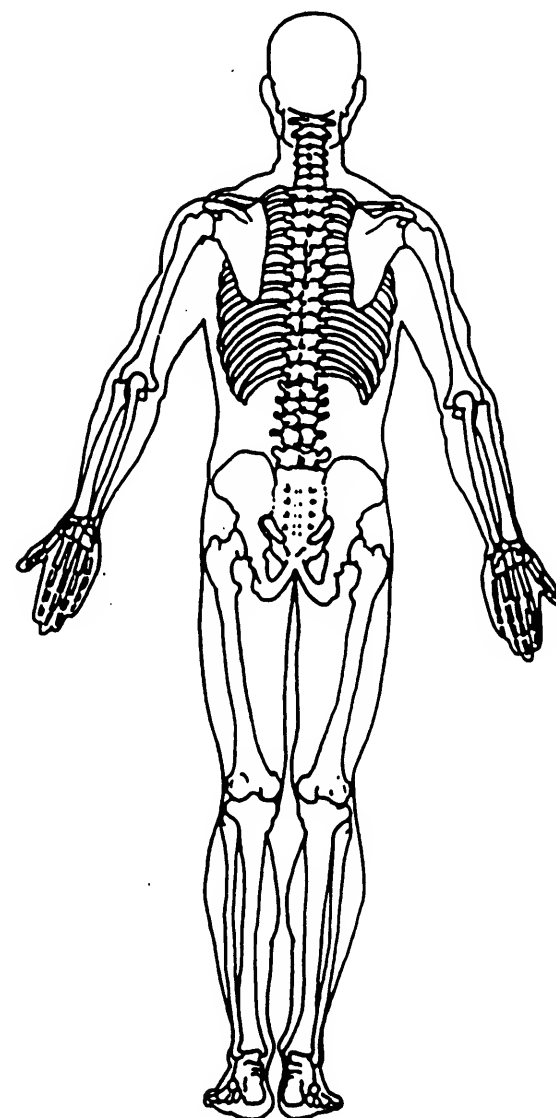
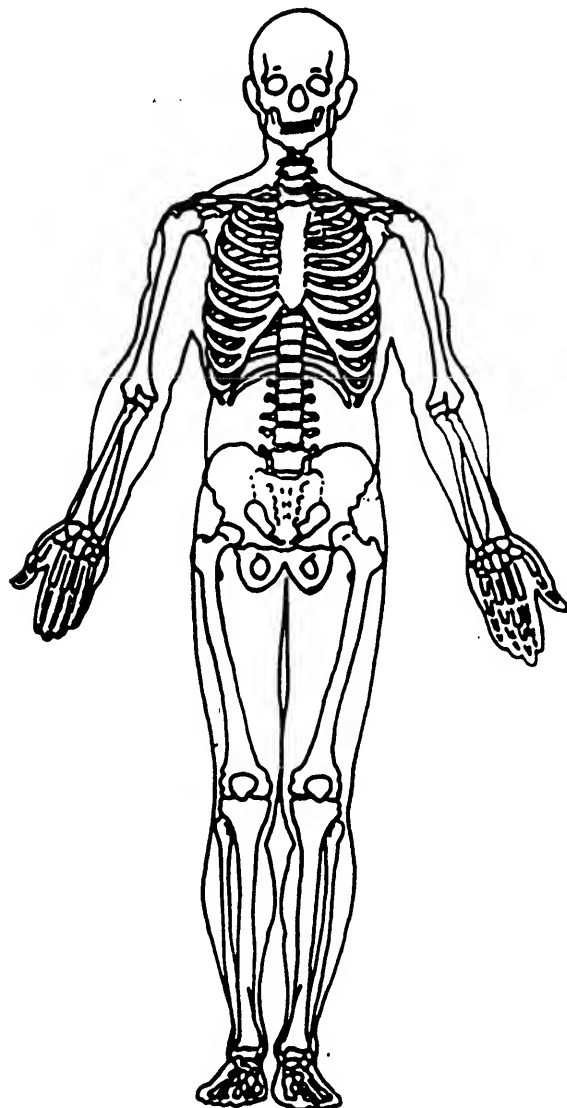
PCO<sub>2</sub> \_\_\_\_

HCO<sub>3</sub> \_\_\_\_



**OFFICIAL INJURY DATA — SKELETAL INJURIES**

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additionel or relocated switches, (specify): \_\_\_\_\_
- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

## EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

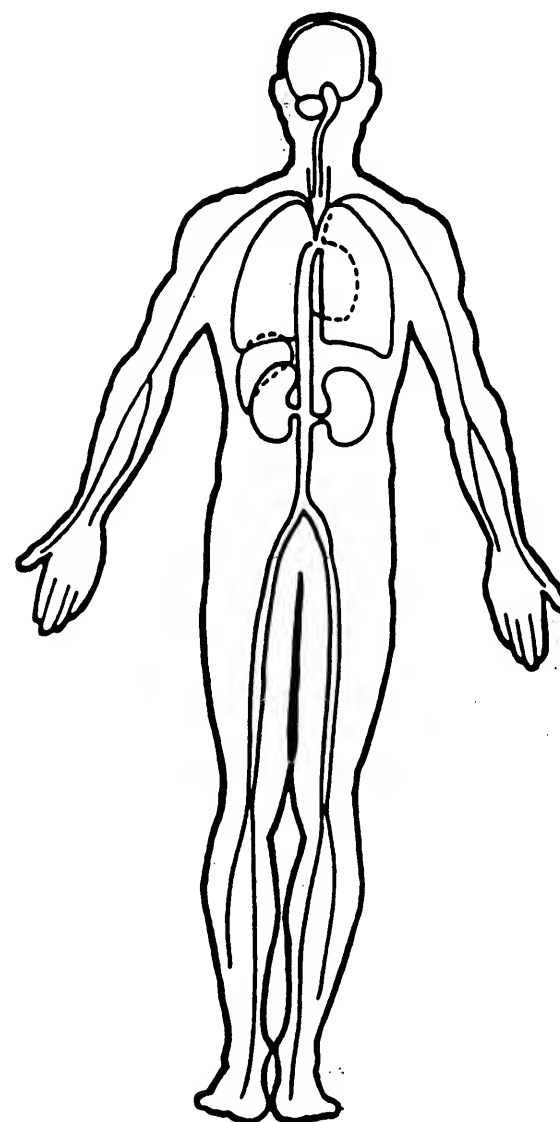
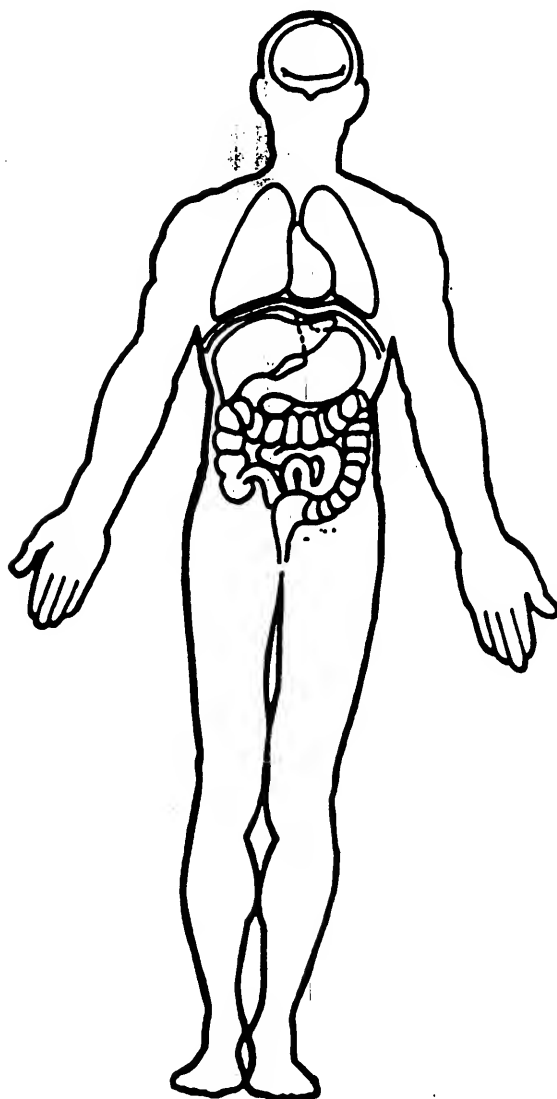
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

## NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# CAUSE OF DEATH

BEST AVAILABLE

## ICD-9-CM

### OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

### MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
<b>A</b>	Autopsy—medical information based upon an invasive examination of a body
<b>ME</b>	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
<b>AR</b>	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
<b>FS</b>	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
<b>DS</b>	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
<b>OS</b>	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
<b>FX</b>	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
<b>PN</b>	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
<b>HP</b>	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
<b>CN</b>	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
<b>ER</b>	Emergency room report—where the author of this information is undefined
<b>EN</b>	Emergency room nurse—"nurse/complaint of" section on the emergency room report
<b>ED</b>	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
<b>NN</b>	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
<b>EX</b>	Radiographic records—taken during the patients stay in the emergency room
<b>CV</b>	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
<b>CR</b>	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
<b>ET</b>	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
<b>O</b>	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)